IMS Adoption Practice:

Student Induction to E-Learning (SIEL)

A Best Practices Framework for Promoting Post Secondary Student Retention Associated with Induction to E-Learning

Final Version 1.0

Date Issued: 19 October 2010

To learn more about the SIEL Adoption Practice project group, visit: http://www.imsglobal.org/siel.cfm

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Executive Summary

The Student Induction to E-Learning (SIEL) project group was formed in early 2008 under the direction of IMS Global Learning Consortium (IMS GLC). The aim of this group is to develop best practices associated with student induction to e-learning, particularly in the area of mitigating the increased risk of post secondary student attrition (as compared to classroom) during this introductory phase of the student lifecycle. The importance of this work lies within the continued growth in e-learning on a regional and global basis, and the impending shift from classroom-based to e-learning as the predominant post-secondary education delivery model by 2015. Increasing access to higher education through e-learning has been a success story over the last 15 years or so; however, the risk of increased student attrition associated with e-learning is signicantly greater than that of classroom-based education and is also perceived as one of the greatest weaknesses associated with e-learning, which poses significant institutional, societal, and individual consequences.

In response to the threats and weaknesses inherent in some e-learning programs, the SIEL project group developed an extensive SIEL Adoption Practice for application by institutions of Higher education (IHE). This adoption practice includes SIEL best practice matrices and a SIEL self-assessment, or checklist, for IHE who wish to gauge their current e-learning best practices against the IMS SIEL Adoption Practice.

With the goal of improving higher education student e-learning retention and persistence during the introductory phase, the SIEL project group intends to inform and guide higher education adminstrators, faculty, and e-learning practitioners who can use it as an institutional self-assessment tool. Starting with a review of the literature, the SIEL project group identified best practices, sorted them into six best practice areas (BPAs), and then sought feedback from their colleagues during international conferences. For the introductory e-learning experience, beginning with advisement and continuing through completion of the first learning assignment, the BPAs are:

1. Assessment and Communication of Expectations
2. Recruitment and Advisement
3. Learning Design and Organization
4. Functional Technology
5. Student Technology Literacy
6. Non-Technical Support Services

The DRAFT SIEL Adoption Practice (SIEL AP) was reviewed by eighteen IHEs using an online survey tool to capture responses. The survey group represented an international e-learning leadership community, including respondents from Australia, New Zealand, United Kingdom, and United States. The outcomes

of this survey were used to enhance and validate the Best Practice areas comprising the SIEL AP and are provided in the Adoption Practice Survey section of this document.

SIEL Project

Title	**Student Induction to E-Learning Adoption Practice (SIEL AP)**
Co-Lead(s)	Dr. Gloria Pickar and Dr. Ross MacKenzie
IMS GLC Lead	John Falchi
Version	1.0
Version Date	11 October 2010
Status	Final
Summary	This document defines the approach to reviewing, approving, and including best practices in a methodology for prospective and new post secondary student introduction to e-learning.
Revision Information	Version 1.0 represents the Final SIEL AP approved by the IMS Technical Advisory Board for public release and broad adoption.
Purpose	The Final SIEL AP is to be used by institutions of higher education to gauge their current student induction to e-learning best practices and in support of developing institution-specific action plans in this area of e-learning.
Document Location	http://www.imsglobal.org/siel/index.html

SIEL Project Group

The following SIEL project group members and their respective organizations contributed to the development of the SIEL AP.

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Introduction and Rationale

The global reach of e-learning continues to proliferate. In the United States, during the Fall 2008 term, greater than 4.6 million students were taking at least one online course, which represents a 17 percent increase over the number reported in 2007 (Allen & Seamen, 2009). This growth-trend in online enrollments does not show any signs of decreasing over the next five years, with research indicating that by 2014 only 5.14 million students will take all of their courses in a physical classroom, while 3.55 million will take all of their classes online, and 18.65 million will take some of their classes online (Nagel, 2009). This scenario suggests that the vast majority of post-secondary students will be educated online through hybrid or completely online delivery models by 2014.

While e-Learning continues to provide greater access to higher education, increased teaching and learning advantages when delivered in a hybrid mode (U.S. DOE, 2009), and increased personal opportunities created by attaining a higher education degree, we must also consider that the impending shift to online delivery will exacerbate increased student attrition issues associated with this form of learning, particularly in the student induction phase. For example, online course administrators believe the failed retention rate for online courses is 10 to 20% higher than traditional classroom environments (Frankola, 2001; Diaz, 2002). This concern is not without merit as several studies have suggested attrition as one of the greatest weaknesses in online education; retention is just as much a pressing concern in the online environment as it is at face-to-face institutions (Carr, 2000; O'Brien, 2002). Additionally, Allen and Seamen (2009) surveyed chief academic officers and asked them if "retaining students is a greater problem for online courses than it is for face-to-face courses." The researchers found that those who "agreed" vs. "disagreed" are more than twice as large as those who disagree, 28% vs. 13%, respectively; and an "institution's online education experience does lead to a stronger conviction that it is harder to retain students in online courses." It should be noted that 59% of chief academic officers responded as "neutral" when asked if student retention is a greater problem in online vs. face-to-face courses. Despite the greater likelihood of student non-completion of course and resultant failed retention and persistence related to retaining online students, the number of college students who are participating in online courses and programs (some with significant global reach) continues to increase dramatically.

Retention of students in both the United States (US) and the United Kingdom (UK) is lower for online distance students than conventional students. Dropout rates associated with distance e-learning typically range from 30 to 50%, often double campus rates in the US (Carr, 2000; Frankola, 2001); 20-30% in Europe (Rumble, 1992), and as high as 50% in Asian countries (Shin & Kim, 1999). As reported in 2006 for the UK, 59% of Open University new online students complete courses compared to 82% course-completion rates for part time students attending traditional campus-based higher education institutions. The financial implications of this disparity are severe. In the UK Open University, 13% of students drop out before their courses even start, and almost 30% before the first assignment is due (Gibbs, Regan, Simpson, 2006). It is clear that dropout prevention and early intervention are necessary. Attitudes in both the UK and United States (US) are commonly ambivalent toward this topic, falling somewhere between "survival of the fittest" (very careful selection of students with very weak follow on

support) and “remediation” (more open access admissions policies and reactive remedial help reliant on student self-referral) (Anderson, 2003).

A student’s first set of experiences with e-learning can be either a barrier to retention or contribute to the likelihood of persistence. Students who have a poor set of first experiences with their e-learning courses often become frustrated and dissatisfied, and are more likely to drop-out. Likewise, students who engage early and frequently with their course content, faculty, and online peers in an effective and cohesive manner are well positioned to succeed.

Therefore, the Student Induction to E-Learning Adoption Practice (SIEL AP) is aimed at student induction into the e-learning environment. Addressing the increased rates of attrition associated with e-learning students becomes imperative for addressing several institutional, societal, and individual consequences arising from nonexistent or ineffective practices in this area, including:

- Individual and social consequences as result of failed or poor experience in the e-learning environment.
- Disruption in student’s attainment of academic goals and objectives.
- Cost to the student for registration and course materials.
- Initial cost to IHE to recruit lost student.
- Cost to replace student(s) who drop and do not complete their course or persist according to their academic plan(s).
- Loss of positive student testimonials.
- Conversely, negative testimonials.
- Loss of potential workers in the field of study.
- Effect on e-learning and prospective loss for future participants in e-learning in general.

SIEL Goals and Objectives

In approaching the task of developing a SIEL AP for prospective and new e-learning students, the Project Group was cognizant that they were confronting a dynamic array of variables, all of which needed to be addressed in producing a successful student experience. While e-learning as a term has been defined for the purposes of this document as ‘computers and electronic technology mediated learning’, it is acknowledged that the interpretation of the term e-learning and its manifestations in institutional practices are many and varied. Irrespective, however, of our particular interpretation of the term e-learning, there appears to be a broad consensus that the aim is to use technology to enhance the student learning experience.

The primary focus of the SIEL AP is to anticipate the needs of prospective and current first year students who are faced with engaging in a technology-enhanced learning environment with minimal or no experience with e-learning. In responding to this challenge at the institutional level, the SIEL AP provides a systemic approach for the deployment of technologies and practices in course units or programs of study involving faculty, instructional designers, institutional administrators, student support staff, and IT services.

There is a particular emphasis in guiding the use of online learning environments using the Internet as the primary means of communication. It is contended, however, that the guidance provided in this document is equally relevant to institutions choosing enhancement strategies based on hybrid or blended learning environments.

The choice of the six best practice areas (BPAs) that comprise the SIEL AP was done to ensure that all aspects of the organizations activities affecting the induction to e-learning were considered. The areas address the identification of how the learning experience is changed under the particular form of e-learning being applied; how that is communicated to students, reflected in the learning design and delivery; and how staff and students are supported in their engagement together and with the technologies.

The overarching principle underpinning the SIEL AP is that the deployment of learning technology, whether in a fully online context or in hybrid learning contexts, should be based on sound pedagogical principles already established for face-to-face teaching, learning, and assessment. Inherent, however, in the SIEL AP is the challenge to use technology enablement not just as a means of producing more effective and efficient student learning but as a means of transforming the nature of the learning experience.

The goal of the SIEL AP is aimed at improving **post secondary student e-learning retention and persistence** with specific objectives to:

- Assist with communicating student and institutional expectations prior to the student's first e-learning course experience.
- Inform IHEs and e-learning leaders, faculty, and practitioners about best practices for student induction into e-learning.
- Provide IHEs with a self-assessment tool to evaluate the effectiveness of their e-learning induction practices, using the SIEL AP as a guide to conduct this evaluation.
- Prepare first year students for engaging effectively in e-learning courses and programs.
- Induct students into e-learning courses during the early weeks of their first year.

Intended Audience

The best practices contained in the SIEL AP are relevant to a range of key stakeholders in institutions of higher education (IHEs) as well as e-Learning service providers, including:

- Institutional administrators who have responsibility for ensuring that prospective students, and those beginning their first year, are able to take advantage of the opportunities offered by technology-enhanced learning experiences;
- Faculty who need to ensure that best practices for technology enhancements are incorporated in teaching and learning activities;
- Instructional designers who have responsibility for optimizing the use of existing and emerging technologies to enhance the student learning experience;
- IT services who provide the necessary infrastructure to ensure that the relevant services are accessible and user-friendly for students;
- Student support staff who assist students in adapting to the campus environment and to the use of the technology infrastructure; and,
- Institutional marketing and recruitment personnel with the responsibility of marketing institutional online offerings and recruiting first year students.

Assumptions

The following assumptions have been made by the SIEL project team with respect to developing the SIEL AP and with regards to those organizations and IHEs who intend on implementing it. These assumptions pertain to both strategic and tactical activities and systems and support services that need to be in place prior to applying the SIEL AP:

- Both teacher and student have a basic level of information technology, sufficient to access the Internet, use a word processing application, and communicate via online applications/tools;
- IHE has developed an institution-specific strategic plan addressing the implications of technology on teaching and learning for the institution and is committed to implementing that plan;
- Sufficient technological infrastructure is in place to support the IHE's e-learning initiatives;
- Policies for effectively managing the online program are in place; and,
- The appropriate leadership, both tactical and strategic, is in place to manage the IHE's online program and courses.

SIEL Adoption Practice Scope

While the SIEL AP and underlying BPAs may be applicable to other educational or e-learning situations, such as K-12 and corporate education, it is specifically designed to address:

- Post secondary, higher education
- International community
- Distance e-learning

- Wholly online and blended online courses and programs with minimal on-campus residency experiences
- Induction phase of the student experience

Methodology

The SIEL AP is derived from several key activities, including identifying and analyzing relevant peer reviewed literature; input from an international group of e-learning experts; and, feedback from the larger e-learning provider community, as gathered from SIEL participants while conducting presentations at industry meetings, conferences and seminars. Additionally, the Australian research team, funded by DEEWR, gathered preliminary SIEL Framework validation information from a series of interviews with academics and executives involved in online education in Australia.

Step 1: Literature Review

A literature search was conducted by the SIEL project team supported by Australian (DEEWR) and US (Penn State World Campus) researchers, aimed at identifying the peer-reviewed research associated with online student induction practices leading to successful student completion, retention, and persistence. Various resources were used to conduct this search, including Google Scholar, Google Books, Griffith University's library catalogue and Education related databases such as ProQuest, Informit, and EBSCO. Using a range of keywords, including 'e-learning', 'online learning', 'online education', 'hybrid learning', 'blended learning', 'retention', 'attrition', 'higher education', 'tertiary education', 'best practice', 'framework', 'good practice', etc., 223 sources were identified, which included reports, papers, books, and book chapters as well as websites. This list of literature was complemented by practical expertise and insight offered by the SIEL project team (see SIEL Project Group Above) for a complete list of the individuals, institutions, and service providers who supported the development of the SIEL AP.

Each individual literature resource was coded according to industry sector, type of online experience discussed, and BPA(s) it related to; actors (e.g., the students, institution, etc.) were also identified. Subsequently, literature resources were then summarized in terms of the author(s)'s questions posed, assumptions, and arguments. Members of the SIEL project group were then assigned a subset of the literature pool to identify trending and effective practices aimed at enhancing first-year student induction to the online environment which led to reduced attrition rates and conversely, increased retention and persistence rates. Of the 223 literature sources identified by the SIEL team, 133 sources met the search and review criteria defined above.

Step 2: Creating the Draft SIEL AP

Based on the outcomes of the literature search, review, and analyses described above, the SIEL project group constructed a framework for the best practices for student induction to e-learning. The SIEL Framework, in its current state, includes 6 Best Practice Areas (BPAs), including:

1. Assessment and Communication of Expectations
2. Recruitment and Advisement
3. Learning Design and Organization

4. Functional Technology
5. Student Technology Literacy
6. Non-Technical Support Services

The SIEL project group then defined the various subcomponents for each BPA as derived through the literature and experience drawn from the SIEL project participants. The BPA subcomponents identify specific activities, services, policies, procedures, and activities in a checklist format that can guide and support an IHE's successful implementation of a given SIEL BPA.

Step 3: Review and Feedback from the International E-Learning Community

To gain feedback during the development of the DRAFT SIEL AP and while completing the final framework, SIEL project participants delivered presentations and papers at industry conferences worldwide. The input from these audiences provided tremendous feedback as to the direction, acceptance, objectives, and overall framework developed by the SIEL project group. Some of these events and the presenters included:

- IMS GLC Learning Impact Summit 2008, Dr. Gloria Pickar
- IDEA Conference, 2008, Dr. Kerri-Lee Kraus and Dr. Celina McEwen
- Sloan-C Asynchronous Learning Conference, 2008, Dr. Gloria Pickar and Heather Chakiris
- ASCILITE, paper by Dr. Gloria Pickar and Dr. Stephen Marshall, delivered by Dr. Stephen Marshall
- EDUCAUSE Australasia, 2009, paper by Dr. Kerri-Lee Kraus and Dr. Celina McEwen, delivered by Dr Stephen Marshall
- IMS GLC Learning Technology Advisory Council – Annual Meeting, Dr. Gloria Pickar and Dr. Ken Udas
- CITE 2008, John Falchi and Heather Chakiris
- Comments were also sought through formal and informal conversations between the SIEL project members and representatives of various stakeholder groups, both nationally and internationally.

Input and suggestions derived from the events listed above were analyzed and incorporated into the SIEL framework, as deemed appropriate by the SIEL project group in the creation of this document.

Step 4: Survey the International IHE Community to Gain Feedback Related to Draft SIEL AP

The SIEL project group collaborated with an international body of IHE to seek input regarding the importance and application of SIEL best practices at their respective institutions. Input was gathered via an online survey tool and addressed the following:

- On a scale of 1-5, with 5 being the highest level, rate the importance of the BPA and each subcomponent comprising a given BPA
- Identify which of the Draft SIEL best practices are in place at that institution
- Report their current attrition and retention rates in support of longitudinal studies – optional
- Develop a plan for enhancing their SIEL best practices based on the outcomes of their self-assessment against the SIEL AP.

Eighteen IHEs participated in this survey and their feedback was captured using an online survey tool. The survey group included e-learning leaders from Australia, New Zealand, United Kingdom, and United States. The outcomes of this survey were used to enhance and validate the Best Practice areas comprising the SIEL AP and are provided in the Adoption Practice Survey section of this document.

Step 5: Revision and Publication of the SIEL Framework and BPAs

The SIEL project group reviewed the survey data derived from Step 4 above and made slight modifications to the final SIEL AP as recommended by the survey outcomes and agreed to by the project group. This SIEL AP Final v1.0 is the outcome of the methodology defined above.

SIEL AP Framework

The remaining sections of this document represent the SIEL AP framework which has been created to align with all goals, objectives, scope, assumptions, intended audience, and rationale discussed above. The SIEL AP Framework includes the following:

- SIEL BPA Narrative Synthesis: Provides a narrative summary of all of the literature resources reviewed by the SIEL project team to develop the current SIEL AP. Narrative syntheses have been developed for each of the six BPAs. Narrative syntheses provide the specific references associated with a given BPA, so for those institutions requiring additional information or direction to implement a specific BPA or subcomponent, the respective narrative synthesis will provide a quick reference and direction to find more information.
- SIEL Best Practices Checklist: Provides IHEs with a tool to conduct self-assessments to gauge their current SIEL methodologies against the SIEL AP. Outcomes of this self-assessment can be used in support of e-learning planning activities; thus enabling the IHE to gauge the effectiveness of its specific e-learning program or courses (i.e. in the area of student induction to e-learning). Institutions can use the completed checklists to create an action plan to address those BPAs/subcomponents that are applicable to their e-learning program or courses but not in place.
- SIEL Literature Review and Phase Matrix: Documents the related literature for each best practice and identifies the best phase of the student induction experience for the practice to be implemented. Matrices are intended to further inform the IHE about when, how, and why to adopt the best practices.
- Terms and Definitions: Provided to establish a common understanding of terms and definitions used in the SIEL AP to ensure BPAs are applied in a consistent manner across IHEs.
- References: All references cited in the SIEL AP are provided, enabling IHEs to conduct further review of the research and case studies, as well as to address specifics associated with the SIEL AP BPAs.

SIEL BPA Narrative Synthesis

The following narratives describe each Best Practice Area citing relevant literature.

Best Practice Area 1: Assessment & Communication of Expectations

The use of e-learning is sufficiently unfamiliar to many students, and the range of possibilities so diverse, that it is important to caution students and provide them with opportunities to familiarize themselves with what to expect (Hillesheim, 1998). Many students will need to make particular arrangements so they get the most benefit from e-learning and supplying them with the information in advance ensures that they will not be forced to withdraw at a later date, or struggle to raise their technology skills while trying to learn the course content (Fredericksen et al., 1999; Waterhouse & Rogers, 2004; Ragan, 1999).

Continuing improvement in student computer literacy skills and technical capability, and the inherent usability of new technology systems does not lessen the need for ongoing training and detailed information about e-learning procedures and technologies (Concannon et al., 2005; Kvavik & Caruso, 2005). Kvavik and Caruso's recent study identified the importance of clarifying and communicating 'which information technologies we want to use…at what level of sophistication, and for what purposes' (p. 19). They add that it cannot be assumed that students will adopt new technologies without the availability of comprehensive training based on systematic planning that recognizes required skill levels: 'Students need to learn how to learn with the new technologies [and] Institutions should…articulate concrete IT learner competencies and literacy for students' (p. 19).

According to Vonderwell and Turner (2005), e-learners 'need to be self-regulated, disciplined, and know how to learn and explore different sources and strategies for learning' (p. 67). These requirements, and understanding how to meet them, are a pre-requisite for e-learning, which calls for students to be 'prepared for technology, learning management, pedagogical practice, and the social roles required for online learning' (Vonderwell & Zacharia, 2005, p. 225). Bouhnik and Marcus (2006) refer to students' need for guidance to avoid functional and psychological barriers, and to ensure that the 'technology itself will remain transparent' (p. 303).

Best Practice Area 2: Recruitment and Advisement

Student success in e-learning is a complex area with conflicting information in the literature on what determines success and what factors suggest a risk of student failure or non-completion (Mandernach et al., 2006). Prospective students should be targeted for e-learning programs appropriate for their interests and qualifications (Shaik, 2005). Marketing collateral and information should follow truth in advertising standards with reliable and timely response to requests for more information. Students need to be well supported prior to their studies by experienced staff who can provide individualized guidance on appropriate courses, workloads, and ways students can prepare themselves for their studies (Tresman, 2002). Time management skills are a key determinant of success for many students, however

students must also be strongly self motivated and self-reliant, particularly if studying at a distance from the institution (Diaz, 2002; Mandernach et al., 2006). Literacy skills are also essential and students must be able to easily use written materials produced by others and also communicate effectively using text themselves (Mandernach et al., 2006).

Best Practice Area 3: Learning Design & Organization

Design and organization of the e-learning course is an important factor in the success and retention of students during the early stages of course delivery. Factors such as pedagogy, a learner-centered course design, course design metrics, interaction and engagement, and feedback are all important for the design of the learning environment. Lotkowski, et al. (2004), indicates the importance of student retention in the first few weeks of course delivery. The learning environment and course components have a direct relation to student drop-out rates. Design of social interaction in the course enhances student's involvement, confidence, and motivation to continue engagement in the course. Rovai (2002) concluded the social engagement and community building aspect of e-learning aid in students making connections to the course, facilitators, and peers. The initial connection at the start of the course is critical to reducing the anonymity of students to each other and to their facilitator.

Organization and structure of the course during the initial induction period leads to students' continuation in the course. Consideration for the sequence and tempo in which content is presented reduces the cognitive overload students experience during the first few weeks of a course (Tyler-Smith, 2006). Introducing content and activities at the beginning of the course to meet learning objectives are found to positively impact student induction and satisfaction with e-learning (Britain, 2007; Smith, 2006). Embedding metrics in the learning design to monitor student activity, performance, and early assessments identify critical factors of student success and their experience in the course (Lotkowski, et al., 2004). Retention is also linked to a quality review of the e-learning course prior to delivery to ensure critical success factors are in place and adequate (Dietz-Uhler, Fisher, & Han, 2008).

Course design is also impacted by the facilitator's experience and suitability for delivering e-learning. Facilitator service levels such as responsiveness, communication of feedback, and interaction with students are tied to course retention and return rates of students (O'Brien & Renner, 2002).

Best Practice Area 4: Functional Technology

As students begin their studies, they are generally very positive with their expectations for information communication technology and its role in their studies (IPSOS MORI, 2008). The issue becomes providing access to specific technologies to the students and preventing barriers caused by the technologies. Priority needs to be given "user-friendly hardware, software, and communication vehicles that help faculty and students use technologies efficiently and effectively" (Chickering & Ehrmann, 2008). Taking a step back into the big picture, it is also important that the instructional technology integrate with other enterprise-wide systems used on the campuses such as grades, library, registration and other systems (Conole, 2004). To simplify and streamline, institutions might offer a limited set of technology tools that are easy to use and customize (Sheely, Veness, & Rankine, 2001). This customization of functional technology refers to programming, scripts or other modifications to the technology to fit the institutions business practices, policies or schedules. Full integration can lead to the fifth generation of distance

education as described by Taylor (2002). The selection and implementation of technologies must fit into the institutional culture, follow student expectations and use as well as parallel what is currently in the marketplace (Nied, et al., 2007).

When learning technologies are created or evaluated by the IHE, some aspects of the environments being developed or evaluated include its portability and ease of access within the contexts and situations of the student population as well as allowing for the expectations of student-student, student-faculty and student-content interactions with the complexity needed for learning (Hung and Chen, 2001; Chickering and Erhmann, 2008; Lorentsen, et al., 2002). To the point, the functional technology should "manage and facilitate the intense interactions and dynamism of both information (content and resources) flow and participants' involvement" (Hung, et al., p. 10). Building on Bunderson's early work with the concept of learner-managed instruction in which the user rather than the computer controlled the personalization, as new tools are explored and considered, it is important for them to be flexible with the delivery model to allow for dynamic and customizable content while staying highly reliable to avoid frustration from faculty and learners (Maroulis & Reushle, 2005; Koper, 2006; Butler & Sellborn, 2002; Burdette, 2003). This flexibility must be counterpoised with accountability and a sense of continuity often provided by templating and other structuring of the content or interactions (ACU, 2006; Laws, et al, 2003; Lorentsen et al., 2002). What also appears to be of increasing importance is the sustainability and scalability of the chosen technology rise while costs decrease (Laws, et al., 2003; Taylor, 2002).

Best Practice Area 5: Student Technology Literacy

Student technology literacy is a key component to success in e-learning. However, it is important to recognize that defining technology literacy for e-learning is a complex area combining media literacy, information literacy, and computer literacy (Kellner, 2006) as well as general communication skills and motivation (Cao, 2005; Kirkwood and Price, 2005). Conole et al. (2006) notes that students can make use of a significant variety of technological tools in their learning, rather than depending on individual systems such as LMSs. There is an expectation among modern students that tools can be transferred and combined in flexible ways depending on the specific need. Despite this observation, the modern student body is diverse and students bring with them a diverse set of skills and capabilities, along with a range of concerns, fear and lack of confidence that can prevent them making best use of their skills (Lockitt, 2004; Sharpe, 2005; Kennedy et al., 2006). It is also important to be aware of the range of intentions that students bring to their studies, for some the technology is merely a means to an end, for others, it will be an important part of their desired outcomes (Sharpe, 2005).

Salmon (2000, p. 27) notes that issues of access to technology and systems and motivation are interdependent and that students require a combination of information, technical support and encouragement to engage effectively with the tools provided in their courses. Teachers and institutions need to recognize the psychological barriers that may prevent students from achieving skill in using technology to support their own learning (Sharpe, 2005; Cramphorn, 2004; Salmon, 2000).

Best Practice Area 6: Non-Technical Support Service

A pro-active system of student support is essential for student success, retention, persistence, and satisfaction. A comprehensive system of learner support services helps to erase feelings of isolation, lack of self-direction, and eventual decreases in motivation levels that lead to high online student attrition. The early phases of the student experience with distance e-learning set the stage for student expectations of resources and services that will be available, orientation to these resources, successful intervention for at-risk students, and proactive prevention services to avoid student withdrawal and attrition during the vulnerable induction period. But, access to services that are typically taken for granted on campus is often cumbersome, irregular, or non-existent in the online environment. Online students should have access to the same resources and services as on-campus students and with similar ease and functionality. Beyond technical support and services described in BPA #5, e-learning students need remote access to admission and registration, tuition and fee payment, financial aid, textbooks, personal support and counseling, academic advising, tutoring, remediation, transcripts, and library resources. Even implementing accessibility and assistive technologies specifically designed for disabled students inevitably benefits all online students (Edmonds, 2004). Distance should not preclude interface with support services and ready access through a common online portal is preferred, enhanced by regular telephone and email connectivity. Further, early assessment of student risk and readiness for e-learning is an important drop-out prevention tool, including one-on-one mentoring and support, mandatory orientation, development of a personal learning plan, and self-assessment tools (Ludwig-Hardman & Dunlap, 2003). In a small study of 211 distance learning students, Morris, Wu, and Finnegan (2005) found that locus of control and availability of financial aid were able to identify drop out and persistence with accuracy of 74.5%.

Early intervention and a proactive approach rather than a reactive one by both faculty and student services professionals are key to student retention. Course tutors or retention specialists should clearly and consistently encourage persistence and discourage withdrawal with well defined “hand-over” or “continuity of care” procedures designed to ease the way for students moving on to new courses or new staff (Tresman, 2002). Frankola (2001) cites lack of student support as a common reason for students dropping out of online programs. Yukselturk and Inan (2006) reporting on a small survey study conducted in Turkey with 276 online students found that student attrition is due most frequently to lack of time, personal problems, expenses, and motivation—not issues with course content, the program, failure with exams, or instructors (the last two were rated as the lowest reasons). Also of importance students believed they could not get enough satisfactory support and feedback.

Mager (2003) reporting on a study conducted at Ohio State University in the US demonstrated a retention improvement of 4% using “tele-counsellors” to contact students at course start, at a cost of $169 per student retained but a 650% return on each invested dollar. In a large UK study including 3500 students, retention was increased by 3% with 60% of the students with the highest predictability of dropping out. This was achieved by making proactive telephone calls to give encouragement and support around the start of the course (Peoples, 2003). In another UK study, telephone intervention calls targeted to at-risk students led to a 3% increase in retention, at a cost of $500 (£300) per student, and 300% ROI. A range of prevention and intervention techniques like tele-support, have proven effective for improving student retention, including student-student mentoring (very high retention

effect) and "supplemental instruction," although costly administratively (Simpson, 2003). Getting students in the right course or program in the first place is obvious with students reporting wrong course choice as the second most important reason for student drop-out; but it is hard to quantify retention effects and students are prone to ignore advice (Yorke, 1999). In a large UK study reported over three years, tele-tutors contacting students by phone several weeks before the first course assignment was due improved student retention through submission of the first assignment by 4% with a collateral 4% improvement in first assignment grades and 6% improvement in overall course grades and course completion, and more than $2 million in net revenue (savings). It is important to note that in the UK study, phone contact (rather than email) was most highly valued by students and they perceived the benefits as encouragement, motivation to persist, and clarification of assignment demands, rather than assignment tutoring or study guidance. The addition of a tutor helpline targeted at the student support counselors / tutors can be used to reach out to them to give them support, prompt them to make contact with students, and coach them on potential student risks for early identification and intervention (Gibbs, Regan, & Simpson, 2006).

SIEL Best Practices Checklist

Intended Use: The SIEL Best Practices Checklist is intended to provide IHEs with a tool to conduct self-assessments to gauge their current SIEL methodologies against the SIEL AP. Outcomes of this self-assessment can be used in support of e-learning planning activities; thus enabling the IHE to gauge the effectiveness of its specific e-learning program or courses (i.e. in the area of student induction to e-learning). Institutions can use the completed checklists to create an action plan to address those BPAs/subcomponents that are applicable to their e-learning program or courses but not in place.

The importance of a given best practice related to student induction to e-learning is measured from 1-5, with 1 as "Not Important" to 5 as "Very Important". Additionally, the Best Practices Checklist enables IHE to capture whether best practices are in place at their IHE by placing a check in the "In Place" column corresponding to the appropriate Best Practice in the checklist below. Understanding the importance of a given best practice and whether or not it is in place at a given IHE, enables the IHE to build an action plan based on IHE-specific priorities.

Best Practice Area 1: Assessment and Communication of Expectations

Institutions need to provide students with clear information on the technology expectations that students will face in their studies so that they can prepare themselves in advance and be able to focus on their learning, not on the technology.

1.1 Defining Rationale: How does the IHE identify the rationale for technology expectations made of students?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		1.1.1	Identify technologies required
1-2-3-4-5		1.1.2	Determine the purpose for using the technology
1-2-3-4-5		1.1.3	Determine the sophistication of use needed for those technologies (staff and students)
1-2-3-4-5		1.1.4	Align the requirements with the learning objectives of the course or program of study
1-2-3-4-5		1.1.5	Assess the implications of accessing the technology for students
1-2-3-4-5		1.1.6	Provide contingencies or plans to address the failure to meet the expectations

1.2 Systems and Processes: How does the IHE incorporate technology expectations in formal systems, processes, and policies?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		1.2.1	Ensure consistency of technology use where possible and appropriate
1-2-3-4-5		1.2.2	Ensure that the expectations are apparent in the formal instructional design procedures
1-2-3-4-5		1.2.3	Ensure that the expectations are apparent in the formal approval and oversight procedures

1.3 Student Expectations: How does the IHE identify student's expectations?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		1.3.1	Collect expectation information from students and staff
1-2-3-4-5		1.3.2	Conduct diagnostic assessments of students' abilities to meet expectations
1-2-3-4-5		1.3.3	Collect feedback after completion to see if expectations were met

1.4 Communication: How does the IHE communicate technology expectations to students?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		1.4.1	Ensure that the expectations are apparent in the formal communication procedures
1-2-3-4-5		1.4.2	Provide students with opportunities to familiarize themselves with the requirements prior to commencing study
1-2-3-4-5		1.4.3	Ensure requirements are reflected consistently and completely in policies and statutes
1-2-3-4-5		1.4.4	Provide a mechanism for obtaining assistance in understanding the requirements
1-2-3-4-5		1.4.5	Provide a mechanism for validating that the requirements have been met

Best Practice Area 2: Recruitment and Advisement

Institutions need to provide students with clear information on the implications of studying using e-learning, including clear advice and guidance on realistic programs of study given the student's skills and experience.

2.1 Recruitment: How do students learn about the e-learning program that is appropriate for their learning objectives and qualifications?

Importance	In Place	Ref #	Practice
1-2-3-4-5		2.1.1	Target qualified prospects appropriate for the program of study
1-2-3-4-5		2.1.2	Market the program of study with truthful and realistic advertising messages
1-2-3-4-5		2.1.3	Respond to interested prospects in a timely manner

2.2 Advisement: How are students advised on their proposed studies?

Importance	In Place	Ref #	Practice
1-2-3-4-5		2.2.1	Provide students with assistance in selecting appropriate courses
1-2-3-4-5		2.2.2	Ensure that students are not undertaking too many e-learning courses
1-2-3-4-5		2.2.3	Ensure that students understand the timing, tempo, and workload implications of their proposed studies
1-2-3-4-5		2.2.4	Ensure that students understand the need to maintain a high degree of personal engagement and motivation

2.3 Assessment: How are students assessed for readiness and appropriateness for e-learning?

Importance	In Place	Ref #	Practice
1-2-3-4-5		2.3.1	Provide guidance on workload expectations

1-2-3-4-5		2.3.2	Provide specific training on time management for e-learning
1-2-3-4-5		2.3.3	Ensure that students have the necessary academic and technology literacy skills needed to engage with content
1-2-3-4-5		2.3.4	Ensure that students have the necessary written communication skills needed to participate effectively

2.4 Diagnosis: What early diagnosis procedures are in place?

Importance	In Place	Ref #	Practice
1-2-3-4-5		2.4.1	Ensure students have all necessary resources to start their studies promptly
1-2-3-4-5		2.4.2	Provide early opportunities within courses to test student abilities
1-2-3-4-5		2.4.3	Provide prompt feedback to students on their abilities to study using e-learning
1-2-3-4-5		2.4.4	Ensure students are offered timely assistance in addressing any personal study issues, including study/life balance

Best Practice Area 3: Learning Design and Organization

Institutions need to design e-learning courses so that students are effectively integrated and motivated to achieve the learning objectives and actively engage with the content and their learning community.

3.1 Pedagogy: Is the design of the e-learning courses supported by pedagogical underpinnings?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		3.1.1	Provide clearly written and measurable learning objectives for e-learning course outcomes
1-2-3-4-5		3.1.2	Provide an appropriate blend of course materials and learning activities to meet learning objectives
1-2-3-4-5		3.1.3	Use appropriate instructional technologies that facilitate or extend the learning experience to meet learning objectives
1-2-3-4-5		3.1.4	Ensure facilitators receive training, practice, and support in e-learning pedagogy course delivery

3.2 Learner-Centered: How does the IHE provide a learning experience that is more learner-centered?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		3.2.1	Organize the course with a consistent structure and sequence of instructional units to guide students through the course materials and learning activities
1-2-3-4-5		3.2.2	Monitor study time to ensure study load is appropriate for course and learner characteristics
1-2-3-4-5		3.2.3	Ensure learning design supports a range of learning styles, multiple instructional methods, and active learning opportunities

3.3 Community Building: How does the IHE promote learner engagement and community building?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		3.3.1	Ensure the course contains appropriate presence and regular interaction with instructors and facilitators / tutors
1-2-3-4-5		3.3.2	Provide opportunities and explain requirements for student-to-student collaboration and interaction
1-2-3-4-5		3.3.3	Establish community building moderation and monitoring processes
1-2-3-4-5		3.3.4	Provide students and facilitators introduction opportunities at the onset of the course

3.4 Designed for Retention: How does e-learning design contribute to student retention?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		3.4.1	Establish mechanisms to track student progress and success such as course milestones, performance metrics, and reporting
1-2-3-4-5		3.4.2	Provide mechanisms to assist students who struggle with learning activities and performance
1-2-3-4-5		3.4.3	Use a consistent e-learning course template with provisions to provide accessible course contents for students with special needs

3.5 Evaluation: How does the IHE provide assessment feedback and evaluation of the course and student performance?

Importance	In Place?	Ref #	Best Practices

1-2-3-4-5		3.5.1	Establish processes for review of e-learning course quality
1-2-3-4-5		3.5.2	Provide criteria for student evaluation of work and course grading and calculation methods
1-2-3-4-5		3.5.3	Establish mechanisms for students to evaluate e-learning course effectiveness and satisfaction
1-2-3-4-5		3.5.4	Establish and communicate service levels for facilitator availability, responsiveness, and feedback to students about achievement and performance

Best Practice Area 4: Functional Technology

Institutions need to assure the adequacy of the technology infrastructure used to deliver e-learning. The technical environment for teaching and learning needs to be able to provide the necessary functionality in a reliable manner and integrate effectively with other key systems.

4.1 Technology Infrastructure: How does the IHE ensure it has provided the technology infrastructure for e-Learning?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		4.1.1	Evaluate and choose technology via a formal process that explores the system's capacity to address institutional needs, trends in student use/expectations, the fit with the culture of the campus/community, ability to provide measureable learning outcomes and how it increases efficiency, effectiveness and access
1-2-3-4-5		4.1.2	Provide services and assistive technologies to support the learning needs of disabled students
1-2-3-4-5		4.1.3	Determine that technology system provide tools for communication between students and instructors, access to course materials, student assessment and feedback/grades
1-2-3-4-5		4.1.4	Provide staff and resources to support and maintain technical systems and infrastructure
1-2-3-4-5		4.1.5	Evaluate the technology frequently based on its intended purpose of the software and goal and the intended audience for the system

4.2 Front-End Functionality: How does the IHE assure the front-end interface and functionality?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		4.2.1	Determine if the system employs active learning technologies

1-2-3-4-5		4.2.2	Determine if the system's interface is user-friendly and customizable within a template for common look and feel
1-2-3-4-5		4.2.3	Determine if the system provides a technology infrastructure that supports learning and teaching
1-2-3-4-5		4.2.4	Determine if the system allows students to see progress in their course of study

4.3 Back-End Functionality: How does the IHE assure the back-end interface and functionality?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		4.3.1	Determine if technology integrates with other data systems as needed by the IHE
1-2-3-4-5		4.3.2	Determine if technology integrates adequately with other campus resources, such as library and registration, to support student needs

4.4 IT Support: How does the IHE respond to system outages and technical issues?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		4.4.1	Establish mechanisms and service levels within the IHE to quickly and effectively address system outages and technical faults
1-2-3-4-5		4.4.2	Create a procedure to formalize software and hardware maintenance

Best Practice Area 5: Student Technology Literacy

Students need to be competent users of technology if they are to focus on learning rather than on technical issues. Despite the widely held perception that students are proficient in technology use, the diversity of the modern student population means that institutions must avoid presumptions and provide systems that ensure students are well supported in developing technology literacy for their studies.

5.1 Technology Readiness: How does the IHE build student confidence with technology?

Importance	In Place	Ref #	Practice
1-2-3-4-5		5.1.1	Provide personal encouragement to students directly
1-2-3-4-5		5.1.2	Include communication exercises in introductions to courses
1-2-3-4-5		5.1.3	Ensure that facilitators have an early opportunity to know students

			individually so as to identify their needs

5.2 Skill Assessment: How does the IHE recognize student technology skills?

Importance	In Place	Ref #	Practice
1-2-3-4-5		5.2.1	Provide a means for students to independently validate their skills
1-2-3-4-5		5.2.2	Explicitly recognize student's prior experience and skills
1-2-3-4-5		5.2.3	Explicitly address multiple technology literacies when providing support

5.3 Remediation: How does the IHE remediate student skills?

Importance	In Place	Ref #	Practice
1-2-3-4-5		5.3.1	Provide training that is planned, systematic and just-in-time
1-2-3-4-5		5.3.2	Ensure that training and support is linked to an assessment of specific and required skills

Best Practice Area 6: Non-Technical Support Services

A pro-active system of student services and support is essential for student success, retention, persistence, and satisfaction. Online students should have access to comparable resources and services as on-campus students and with similar ease and functionality.

6.1 Orientation & Warning Systems: What systems are in place to advise students about support services and for early identification of at risk students?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		6.1.1	Implement student self assessment of e-learning readiness
1-2-3-4-5		6.1.2	Conduct learning preparedness assessment and support/encouragement telephone calls with new students before start of first course
1-2-3-4-5		6.1.3	Require online orientation course that includes description of support services and how to access them

1-2-3-4-5		6.1.4	Provide training and support to students for accessing library resources online and developing information literacy skills
1-2-3-4-5		6.1.5	Develop individual e-learning action plan with remediation, as needed
1-2-3-4-5		6.1.6	Give new students opportunity to evaluate e-learning start-up and services

6.2 Proactive Prevention: What proactive prevention strategies are in place to prevent students from dropping out?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		6.2.1	Advise students about expectations and workload prior to course choice
1-2-3-4-5		6.2.2	Teach students time management, self-help, and organizational skills
1-2-3-4-5		6.2.3	Contact students by individual tutor (personal support counselor / retention specialist / adjunct facilitator / mentor) by phone before first assignment or assessment is due
1-2-3-4-5		6.2.4	Log student contacts to predict those at risk and trigger interventions/referrals in a timely manner
1-2-3-4-5		6.2.5	Implement peer-to-peer or student ambassador support networks
1-2-3-4-5		6.2.6	Use student evaluation feedback for continuous improvement of services

6.3 Access to Student Services: Can e-learning students access the same services as on campus students?

Importance	In Place?	Ref #	Best Practices
1-2-3-4-5		6.3.1	Provide portal to online student services
1-2-3-4-5		6.3.2	Provide online application, registration, fee payment
1-2-3-4-5		6.3.3	Provide online financial aid information and processing
1-2-3-4-5		6.3.4	Provide online textbook ordering and access to digital content
1-2-3-4-5		6.3.5	Deliver tutoring and academic remediation
1-2-3-4-5		6.3.6	Provide online transcript information

1-2-3-4-5		6.3.7	Deliver online library resources

SIEL Literature Review & Phase Matrix

The following matrix documents the related literature for each best practice included in the SIEL AP, and identifies the best phase of the early student experience for the best practice to be implemented. It is intended to further inform the IHE e-learning implementers about when, how, and why to adopt the best practices.

BPA	Components and Best Practices	PHASE		
1.0	ASSESSMENT & COMMUNICATION OF EXPECTATIONS	Expectations	Preparation	Induction
1.1.0	**Defining Rationale: How does the IHE identify the rationale for technology expectations made of students?**			
1.1.1	Identify technologies required (Kvavik & Caruso, 2005)	X		
1.1.2	Determine the purpose for using the technology (Kvavik & Caruso, 2005)	X		
1.1.3	Determine the sophistication of use needed for those technologies (staff and students) (Kvavik & Caruso, 2005)	X		
1.1.4	Align the requirements with the learning objectives of the course or program of study (Ragan, 1999)	X		
1.1.5	Assess the implications of accessing the technology for students (Fredericksen et al., 1999; Ragan, 1999)	X		
1.1.6	Provide contingencies or plans to address the failure to meet the expectations (Ragan, 1999)	X		
1.2.0	**Policy & Processes: How does the IHE incorporate technology expectations in formal systems, processes and policies?**			
1.2.1	Ensure consistency of technology use where possible and appropriate (Kvavik & Caruso, 2005)	X		
1.2.2	Ensure that the expectations are apparent in the formal instructional design procedures (Ragan, 1999)	X		

1.2.3	Ensure that the expectations are apparent in the formal approval and oversight procedures (Tresman, 2002)	X		
1.3.0	**<u>Student Expectations</u>: How does the IHE identify student's expectations?**			
1.3.1	Collect expectation information from students and staff (Bozarth et al., 2004)	X		
1.3.2	Conduct diagnostic assessments of students' abilities to meet expectations (Ludwig-Hardman and Dunlap, 2003; Newlands et al., 2005)		X	
1.3.3	Collect feedback after completion to see if expectations were met (Newlands et al., 2005)	X		
1.4.0	**<u>Communication</u>: How does the IHE communicate technology expectations to students?**			
1.4.1	Ensure that the expectations are apparent in the formal communication procedures (Hillesheim, 1998; Tresman, 2002; Bozarth et al., 2004)	X		
1.4.2	Provide students with opportunities to familiarize themselves with the requirements prior to commencing study (Hillesheim, 1998; Fredericksen et al., 1999; Tresman, 2002; Corry and Watkins, 2007; Bozarth et al., 2004)		X	
1.4.3	Ensure requirements are reflected consistently and completely in policies and statutes (Waterhouse & Rogers, 2004)		X	
1.4.4	Provide a mechanism for obtaining assistance in understanding the requirements (Zepke & Leach, 2005; Tresman, 2002)		X	
1.4.5	Provide a mechanism for validating that the requirements have been met (Tresman, 2002)		X	

BPA	**Components and Best Practices**	**PHASE**		
2.0	**RECRUITMENT & ADVISEMENT**	**Expectations**	**Preparation**	**Induction**
2.1.0	**<u>Recruitment</u>: How do students learn about the e-learning program that is appropriate for their learning objectives and qualifications?**			
2.1.1	Target qualified prospects appropriate for the program of study	X		
2.1.2	Market the program of study with truthful and realistic	X		

	advertising messages			
2.1.3	Respond to interested prospects in a timely manner	X		
2.2.0	**Advisement: How are students advised on their proposed studies?**			
2.2.1	Provide students with assistance in selecting appropriate courses (Tresman, 2002)	X		
2.2.2	Ensure that students are not undertaking too many e-learning courses (Mandernach et al., 2006)	X		
2.2.3	Ensure that students understand the timing, tempo and workload implications of their proposed studies (Mandernach et al., 2006; Diaz, 2002)	X		
2.2.4	Ensure that students understand the need to maintain a high degree of personal engagement and motivation (Mandernach et al., 2006)	X		
2.3.0	**Assessment: How are students assessed for readiness and appropriateness for e-learning?**			
2.3.1	Provide guidance on workload expectations (Sharpe, 2005; Allan, 2004; Cramphorn, 2004; Meyer, 2003; Sweeney et al. 2004; Mandernach et al., 2006; Diaz, 2002)	X		
2.3.2	Provide specific training on time management for e-learning (Sharpe, 2005; Allan, 2004; Cramphorn, 2004; Meyer, 2003; Sweeney et al. 2004; Mandernach et al., 2006; Diaz, 2002)		X	
2.3.3	Ensure that students have the necessary literacy skills needed to engage with content (Mandernach et al., 2006; Moore et al., 2003)		X	
2.3.4	Ensure that students have the necessary written communication skills needed to participate effectively (Mandernach *et al*., 2006; Moore et al., 2003)		X	
2.4.0	**Diagnosis: What early diagnosis procedures are in place?**			
2.4.1	Ensure students have all necessary resources to start their studies promptly (Mandernach et al., 2006)			X
2.4.2	Provide early opportunities within courses to test student abilities			X
2.4.3	Provide prompt feedback to students on their abilities to study using e-learning			X
2.4.4	Ensure students are offered timely assistance in addressing any personal study issues, including			X

	study/life balance (Wang & Wu, 2004)			

BPA	Components and Best Practices	PHASE		
3.0	**LEARNING DESIGN & ORGANIZATION**	**Expectations**	**Preparation**	**Induction**
3.1.0	**<u>Pedagogy:</u> Is the design of the e-learning courses supported by pedagogical underpinnings?**			
3.1.1	Provide clearly written and measurable learning objectives for e-learning course outcomes (Britain, 2007; Smith, 2006)			X
3.1.2	Provide an appropriate blend of course materials and learning activities to meet learning objectives (Britain, 2007; Smith, 2006)			X
3.1.3	Use appropriate instructional technologies that facilitate or extend the learning experience to meet learning objectives (IPSOS MORI, 2008)			X
3.1.4	Ensure facilitators receive training, practice, and support in e-learning pedagogy course delivery (O'Brien & Renner, 2002)		X	
3.2.0	**Learner-Centered: How does the IHE provide a learning experience that is more learner-centered?**			
3.2.1	Organize the course with a consistent structure and sequence of instructional units to guide students through the course materials and learning activities (Conole, 2004; Goodacre et al, 2006; Hameed, Badii, Cullen, 2008; Siragusa, 2002; Tyler-Smith, 2006)			X
3.2.2	Monitor study time to ensure study load is appropriate for course and learner characteristics (Tyler-Smith, 2006)			X
3.2.3	Ensure learning design supports a range of learning styles, multiple instructional methods, and active learning opportunities (Allen, 2006; Carr, 2000; Chickering & Erhmann, 2008; Diaz, 2002; IPSOS MORI, 2008; Mayes & de Freitas, 2007; Siragusa, 2002; Tyler-Smith, 2006)			X
3.3.0	**<u>Community Building</u>: How does the IHE promote learner engagement and community building?**			
3.3.1	Ensure the course contains appropriate and regular interaction with facilitators (Chickering & Erhmann, 2008; Rovai, 2002)			X

3.3.2	Provide opportunities and explain requirements for student-to-student collaboration and interaction (Barnard, Paton, & Rose, 2007; Chickering & Erhmann, 2008; Lim, 2004; Rovai, 2002; Siragusa, 2002; Topper, 2007)			X
3.3.3	Establish community building moderation and monitoring processes (Hill, 2007; Rovai, 2002)			X
3.3.4	Provide students and facilitators introduction opportunities at the onset of the course (Rovai, 2002)			X
3.4.0	**Designed for Retention: How does e-learning design contribute to student retention?**			
3.4.1	Establish mechanisms to track student progress and success such as course milestones, performance metrics, and reporting (Lotkowski, Robbins, & Noeth, 2004)			X
3.4.2	Provide mechanisms to assist students who struggle with learning activities and performance (Lotkowski, Robbins, & Noeth, 2004)			X
3.4.3	Use a consistent e-learning course template with provisions to provide accessible course contents for students with special needs (Edmonds, 2004; O'Neill, 2001)			X
3.5.0	**Evaluation: How does the IHE provide assessment feedback and evaluation of the course and student performance?**			
3.5.1	Establish processes for review of e-learning course quality (Dietz-Uhler, Fisher, & Han, 2008)		X	
3.5.2	Provide criteria for student evaluation of work and course grading and calculation methods (Chaney, Eddy, Dorman, Glessner, Green. & Lara-Alecio, 2007)			X
3.5.3	Establish mechanisms for students to evaluate e-learning course effectiveness and satisfaction (Chaney, Eddy, Dorman, Glessner, Green, & Lara-Alecio, 2007)			X
3.5.4	Establish and communicate service levels for facilitator availability, responsiveness, and feedback to students about achievement and performance (Gaytan & McEwen, 2007; Kanuka & Jugdev, 2006; Keller, 2008)			X

BPA	Components and Best Practices	PHASE		
4.0	FUNCTIONAL TECHNOLOGY	Expectations	Preparation	Induction
4.1.0	**Technology Infrastructure: How does the IHE ensure it has provided the technology infrastructure for e-Learning?**			
4.1.1	Evaluate and choose technology via a formal process that explores the system's capacity to address institutional needs, trends in student use/expectations, the fit with the culture of the campus/community, ability to provide measureable learning outcomes and how it increases efficiency, effectiveness and access. (Burdett, 2003; Nied et al., 2007)	X		
4.1.2	Provide services and assistive technologies to support the learning needs of disabled students (Edmonds, 2004)	X		
4.1.3	Determine that technology system provide tools for communication between students and instructors, access to course materials, student assessment and feedback/grades (Britain, 2007)	X		
4.1.4	Provide staff and resources to support and maintain technical systems and infrastructure	X		
4.1.5	Evaluate the technology frequently based on its intended purpose of the software and goal and the intended audience for the system	X		
4.2.0	**Front-End Functionality: How does the IHE assure the front-end interface and functionality?**			
4.2.1	Determine if the system employs active learning technologies (Hung & Chen, 2001)	X		
4.2.2	Determine if the system's interface is user-friendly and customizable within a template for common look and feel (Chicerking & Erhmann, 2008; Laws, Howell & Lindsa, 2003; Sheely, Veness & Randine, 2001)	X		
4.2.3	Determine if the system provides a technology infrastructure that supports learning and teaching (Burdett, 2003)	X		
4.2.4	Determine if the system allows students to see their progress through their course of study (Bunderson,	X		

	1974)			
4.3.0	**Back-End Functionality: How does the IHE assure the back-end interface and functionality?**			
4.3.1	Determine if technology integrates with other data systems as needed by the IHE (Conole, 2004, Hung & Chen, 2001, Britain, 2007)		X	
4.3.2	Determine if technology integrates adequately with other campus resources, such as library and registration, to support student needs (Neid et al., 2007)		X	
4.4.0	**IT Support: How does the IHE plan for responding to system outages and technical issues?**			
4.4.1	Establish mechanisms and service levels within the IHE to quickly and effectively address system outages and technical faults		X	
4.4.2	Create a procedure to formalize software and hardware maintenance		X	

BPA	**Components and Best Practices**	**PHASE**		
5.0	**STUDENT TECHNOLOGY LITERACY**	**Expectations**	**Preparation**	**Induction**
5.1.0	**Technology Readiness: How does the IHE build student confidence with technology?**			
5.1.1	Provide personal encouragement to students directly (Salmon, 2000, p27; Cao, 2005; Cramphorn, 2004)			X
5.1.2	Include communication exercises in introductions to courses (Visser & Visser, 2005)			X
5.1.3	Ensure that facilitators have an early opportunity to know students individually so as to identify their needs (Conrad and Donaldson, 2004; Hrabe *et al*., 2005)			X
5.2.0	**Skill Assessment: How does the IHE recognize student technology skills?**			
5.2.1	Provide a means for students to independently validate their skills (Hillesheim, 1998; Clyde and Delohery, 2005; Vonderwell and Zacharia, 2005; Warner et al.,1998; McVay, 2001; Smith, 2001)		X	
5.2.2	Explicitly recognize student's prior experience and skills			X

	(Conole, 2006; Lockitt, 2004; Sharpe, 2005)			
5.2.3	Explicitly address multiple technology literacies when providing support (Kirkwood & Price, 2005; Kellner, 2006)			X
5.3.0	**Remediation: How does the IHE remediate student skills?**			
5.3.1	Provide training that is planned, systematic and just-in-time (Kvavik & Caruso, 2005, p19; Visser and Visser, 2005)		X	
5.3.2	Ensure that training and support is linked to an assessment of specific and required skills (Baptista-Nunes & McPherson, 2002; Hillesheim, 1998; Clyde and Delohery, 2005; Kirkwood & Price, 2005; Kvavik & Caruso, 2005, p19; Vonderwell & Zacharia, 2005)		X	

BPA	Components and Best Practices	PHASE		
6.0	**NON-TECHNICAL SUPPORT SERVICES**	**Expectations**	**Preparation**	**Induction**
6.1.0	**Orientation and Warning Systems: What systems are in place to advise students about support services and for early identification of at risk students?**			
6.1.1	Implement student self assessment of e-learning readiness (Ludwig-Hardman & Dunlap 2003)	X		
6.1.2	Conduct learning preparedness assessment and support/encouragement telephone calls with new students before start of first course (Gibbs, Regan, Simpson, 2006); Mager, 2003; Simpson, 2003; Simpson, 2004; Peoples, 2003; Student Support Research Group, 2003)		X	
6.1.3	Require online orientation course that includes description of support services and how to access them (Lynch, 2001; Ludwig-Hardman & Dunlap, 2003; Marshall, 2007)		X	
6.1.4	Provide training and support to students for accessing library resources online and developing information literacy skills (Marshall, 2007)		X	
6.1.5	Develop individual e-learning action plan with remediation, as needed (Ludwig-Hardman & Dunlap, 2003).		X	

6.1.6	Give new students opportunity to evaluate e-learning start-up and services (Marshall, 2007)			X
6.2.0	**<u>Proactive Prevention</u>: What proactive prevention strategies are in place to prevent students from dropping out?**			
6.2.1	Advise students about expectations and workload prior to course choice (Yorke, 1999)	X		
6.2.2	Teach students time management, self-help, and organizational skills (Yekselturk & Inan, 2006; Schaffhauser, 2009)		X	
6.2.3	Contact students by individual tutor (personal support counselor / retention specialist / adjunct facilitator / mentor) by phone before first assignment or assessment is due (Gibbs, Regan, Simpson, 2006; Hayes, 2002; Tait, 2004)			X
6.2.4	Log student contacts to predict those at risk and trigger interventions/referrals in a timely manner (Tait, 2004)			X
6.2.5	Implement peer-to-peer or student ambassador support networks (Tressman, 2002)		X	
6.2.6	Use student evaluation feedback for continuous improvement of services (Marshall, 2007)			X
6.3.0	**<u>Access to Student Services</u>: Can e-learning students access the same services as on campus students?**			
6.3.1	Provide portal to online student services	X		
6.3.2	Provide online application, registration, fee payment	X		
6.3.3	Provide online financial aid information and processing (Morris, Wu, & Finnegan, 2005)	X		
6.3.4	Provide online textbook ordering and access to digital content		X	
6.3.5	Deliver tutoring and academic remediation (Prendergast, 2003)			X
6.3.6	Provide online transcript information (Tressman, 2002)			X
6.3.7	Deliver online library resources (ALA, 2004)			X

To validate best practices associated with a student's induction to e-learning, the SIEL project group administered a survey to 15 institutions of higher education. Administered in spring/summer 2010, this survey sought feedback to validate the importance and application of identified best practice areas (BPAs) to institutions of higher education. In a secure online delivery format, the BPAs were piloted in a survey to directors of distance learning, faculty, deans, and other individuals with insight into current practices related to retention, persistence, and online delivery programs. Institutions were to indicate the importance on a scale of 1-5, where 1 being "Not Important" and 5 being "Very Important." Application of best practices were rated on a scale of 1-5, where 1 is "don't know" and 5 being "always applied."

The results of the pilot helped to determine the importance and value of SIELs best practice areas. All participating institutions identified the best practice areas in the "important" range of the scale. Additionally, most indicated that they are implementing or starting to implement the SIEL best practice areas. These results garner the significance and importance of SIEL's best practices and lends to development of a certifiable "SIEL of Quality."

Eighteen online learning leaders from 15 higher education institutions participated in the SIEL survey:

Boston University, USA

Eastern Kentucky University, USA

Florida Hospital College of Health Sciences, USA

Marylhurst University, USA

Massey University, NZ

Ohio University Lifelong and Distance Learning, USA

Ohio University, USA

Open University, UK

Tennessee Board of Regents, USA

University of Cincinnati, USA

University of Florida, USA

University of Illinois at Chicago, USA

University of Illinois at Chicago, USA

University of Mary Washington, USA

Victoria University of Wellington, NZ

Terms and Definitions

Term	Definition
Adaptability	Ability of a course to be modified to meet a specific contextual or individual learning need.
Asynchronous	Communication happening without the need for real time participation.
Attrition	Describes the number (or proportions) of students who fail to complete the unit of study in which they are registered.
Course	A unit of instruction in one subject. Course / Unit / Module are typically defined by the IHE.
Customizing	Process of modifying learn material to make it suitable for use in a particular context
Distance e-learning	E-learning delivered substantially at a distance from the IHE home campus without on-campus residency or access, or without substantial face-to-face teaching and learning experiences.
E-learning	Computer and electronic technology mediated learning.
E-learning implementer	Person with tactical responsibility for the success of a given e-learning initiative; one who would be responsible for implementing the SIEL framework, leading the SIEL Self Assessment activities, and monitoring progress.
Facilitator	Responsible for facilitating online course and class objectives and evaluating the work of students. Additionally, addresses student difficulties with course content and basic technology issues.
Faculty	Refers to and is synonymous with academic staff who have responsibility for developing and delivering curriculum.
Induction	First phase of the student's e-learning course, typically ends after the first assessment is taken.
Instructional designers	Teaching support staff who assist faculty in incorporating effective e-learning pedagogy and existing and emerging technologies into the curriculum.
Learning Management System (LMS)	Software used to deliver and track online coursework.
Mentor	A peer who provides support and guidance within a course context. Most likely to be a more experienced student (or tutor) providing support to a less

	experienced student (or tutor).
Online	Using the Internet as a primary communication methodology.
Persistence	Describes the behavior of continuing until one reaches one's educational goal; or, working through to a qualification at the end of a program of study.
Personalizing	Process of adapting learning material to make it suitable for an individual learner – potentially being adapted in response to previous academic performance within the current course or in a precursor course.
Program	Collection of courses leading to a recognized qualification. Program / Course / Unit / Module are institutionally defined.
Progression	Students who progress, academically, towards a stated learning objective or outcome (e.g. certificate, diploma, degree). Where progression is measured by courses or academic units completed related to a specific learning objective.
Retention	Describes the number (or proportion) of students who progress from one part of a program to the next. This might be used in the context of completing a course so that the student is able to progress to the next course in a structured program.
Synchronous	Synchronous communication requires participation in real time
Tutor	A member of academic staff who provides direct support to a student during a course.
Unit/Module	A component of an academic course focusing on a specific theme.
Virtual learning environment (VLE)	Collection of technologies enabling teaching and learning online

Executive Summary: SIEL Adoption Practice Survey

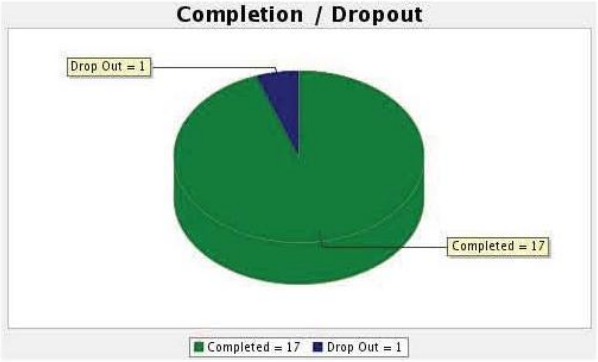
Analytics Powered by QuestionPro Last Updated : Jun 22, 2010

SIEL Survey - Exec Report

Introduction - Executive Summary

The SIEL draft 1 Survey was fielded on 2010-03-19. An invitation to take the survey was mailed out to approximately [Enter Number Here] people, and about [Enter Number Here] took the survey. The survey was administered using QuestionPro online. This allowed users to submit their responses securely online. Listed below are the key findings.

Survey Overview

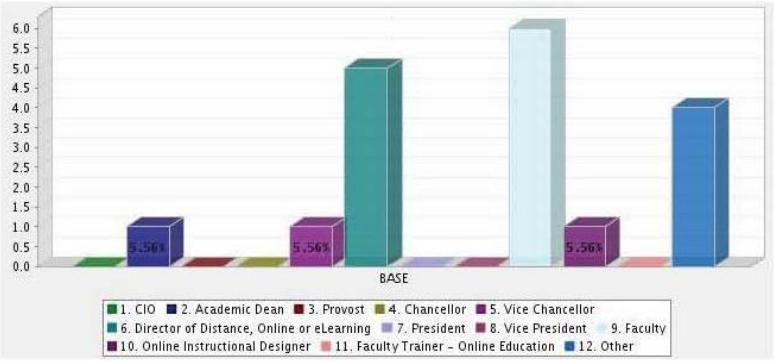


Survey Statistics

Viewed	115
Started	18
Completed	17
Completion Rate	94.44%
Drop Outs (After Starting)	1

- Average time taken to complete survey : 29 minute(s)

Your Role:



Frequency Analysis

	Answer	Count	Percent	20%	40%	60%	80%	100%
1.	CIO	0	0.00%					
2.	Academic Dean	1	5.56%					

3.	Provost	0	0.00%
4.	Chancellor	0	0.00%
5.	Vice Chancellor	1	5.56%
6.	Director of Distance, Online or eLearning	5	27.78%
7.	President	0	0.00%
8.	Vice President	0	0.00%
9.	**Faculty**	**6**	**33.33%**
10.	Online Instructional Designer	1	5.56%
11.	Faculty Trainer - Online Education	0	0.00%
12.	Other	4	22.22%
	Total	**18**	**100%**

Key Analytics

Mean	8.278
Confidence Interval @ 95%	[6.963 - 9.592] n = 18
Standard Deviation	2.845
Standard Error	0.671

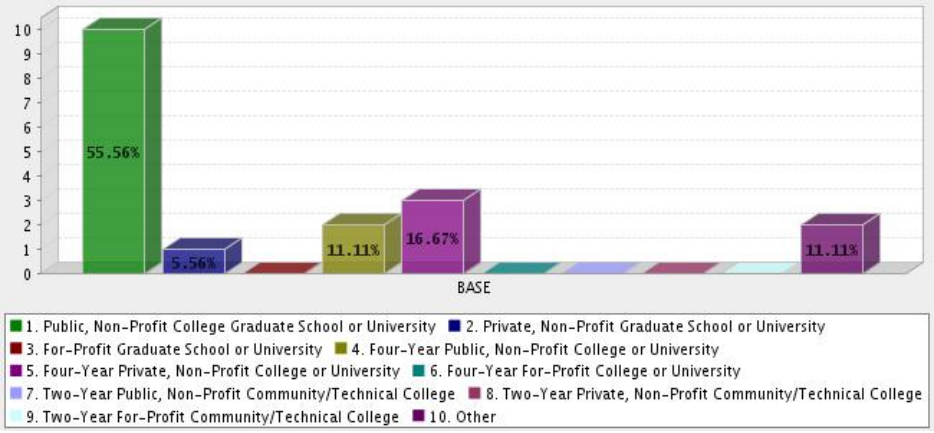
Key Facts

61.11% chose the following options :

- Faculty
- Director of Distance, Online or eLearning

05/11/2010	12595024	Assistant Dir. of Online Programs
05/13/2010	12609201	Assistant Dean
05/14/2010	12612125	Director of School
05/14/2010	12613037	Department Head

IHE Classification:



Frequency Analysis

	Answer	Count	Percent	20% 40% 60% 80% 100%
1.	**Public, Non-Profit College Graduate School or University**	**10**	**55.56%**	
2.	Private, Non-Profit Graduate School or University	1	5.56%	
3.	For-Profit Graduate School or University	0	0.00%	
4.	Four-Year Public, Non-Profit College or University	2	11.11%	
5.	Four-Year Private, Non-Profit College or University	3	16.67%	
6.	Four-Year For-Profit College or University	0	0.00%	
7.	Two-Year Public, Non-Profit Community/Technical College	0	0.00%	
8.	Two-Year Private, Non-Profit Community/Technical College	0	0.00%	
9.	Two-Year For-Profit Community/Technical College	0	0.00%	

10.	Other	2	11.11%	
	Total	**18**	**100%**	

Key Analytics		
Mean	3.056	**Key Facts** **72.22%** chose the following options : Public, Non-Profit College Graduate School or University Four-Year Private, Non-Profit College or University
Confidence Interval @ 95%	[1.670 - 4.441] n = 18	
Standard Deviation	2.999	
Standard Error	0.707	

04/19/2010	12369666	Tennessee Board of Regents eLearning
05/01/2010	12483649	Private online continuing education.

College/University Name:

04/19/2010	12369666	Tennessee Board of Regents
05/01/2010	12483649	Crossroads of Learning
05/04/2010	12544355	Massey University
05/06/2010	12562302	University of Mary Washington
05/11/2010	12594449	University of Florida
05/11/2010	12595024	Boston University
05/12/2010	12602624	University of Illinois at Chicago
05/13/2010	12609201	Univ. of cincinnati
05/14/2010	12611151	University of Illinois at Chicago
05/14/2010	12612125	University of Cincinnati
05/14/2010	12612303	Ohio University Lifelong and Distance Learning
05/14/2010	12613037	University of Cincinnati
05/16/2010	12617208	U of Florida
05/17/2010	12619454	Florida Hospital College of Health Sciences
05/17/2010	12619784	Marylhurst University
05/17/2010	12619836	Florida Hospital College of Health Sciences
05/17/2010	12621221	Ohio University
05/18/2010	12627742	Eastern Kentucky University

e-Mail Address (only used to validate respondent affiliation with college or university):

Location (Country, City, State):

04/19/2010	12369666	Nashville, TN
05/01/2010	12483649	La Canada, CA
05/04/2010	12544355	New Zealand
05/06/2010	12562302	Fredericksburg, VA
05/11/2010	12594449	USA, Gainesville, FL
05/11/2010	12595024	Boston, MA
05/12/2010	12602624	USA, Chicago, Illinois
05/13/2010	12609201	Cincinnati, OH
05/14/2010	12611151	USA, Chicago, Illinois
05/14/2010	12612125	Cincinnati, OH
05/14/2010	12612303	Athens Ohio
05/14/2010	12613037	Cincinnati, OH
05/16/2010	12617208	USA, Gainesville, FL
05/17/2010	12619454	Orlando, FL
05/17/2010	12619784	Marylhurst Oregon
05/17/2010	12619836	USA, Orlando, Florida
05/17/2010	12621221	USA, Athens, OH
05/18/2010	12627742	US, Richmond, Kentucky

Attrition Rate (Describes the number (or proportions) of students who fail to complete the unit of study in which they are registered):

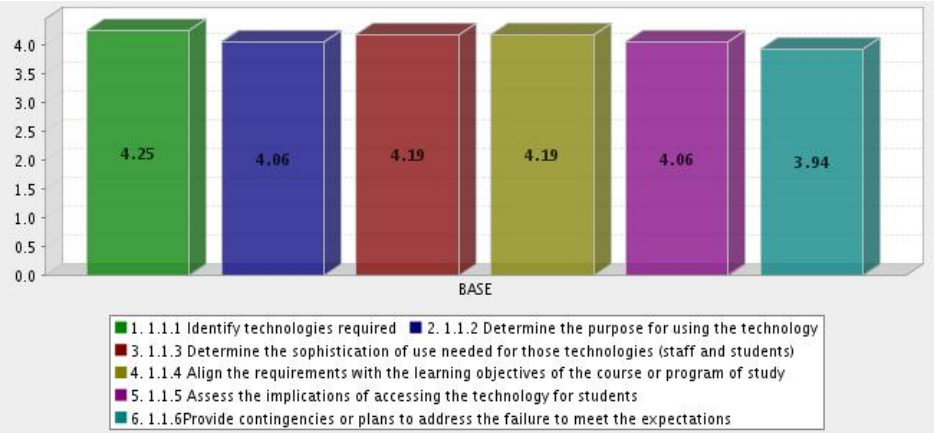
04/19/2010	12369666	Graduate Rates: TTC=70% / Community Colleges=15% /Universities = 45%
05/01/2010	12483649	30%
05/04/2010	12544355	
05/06/2010	12562302	24%
05/11/2010	12594449	20%
05/11/2010	12595024	
05/12/2010	12602624	8%
05/13/2010	12609201	
05/14/2010	12611151	
05/14/2010	12612125	10
05/14/2010	12612303	don't know
05/14/2010	12613037	20%
05/16/2010	12617208	25%
05/17/2010	12619454	5-15%
05/17/2010	12619784	
05/17/2010	12619836	12%
05/17/2010	12621221	5%
05/18/2010	12627742	5-10

Retention Rate (Describes the number (or proportion) of students who progress from one part of a program to the next. This might be used in the context of completing a course so that the student is able to progress to the next course in a structured program):

04/19/2010	12369666	The average course retention rate for online is 40% for a full online course
05/01/2010	12483649	70%
05/04/2010	12544355	
05/06/2010	12562302	84%
05/11/2010	12594449	85%
05/11/2010	12595024	
05/12/2010	12602624	95%
05/13/2010	12609201	83%
05/14/2010	12611151	
05/14/2010	12612125	10

05/14/2010	12612303	don't know
05/14/2010	12613037	90%
05/16/2010	12617208	70%
05/17/2010	12619454	75-90%
05/17/2010	12619784	
05/17/2010	12619836	97%
05/17/2010	12621221	95%
05/18/2010	12627742	75

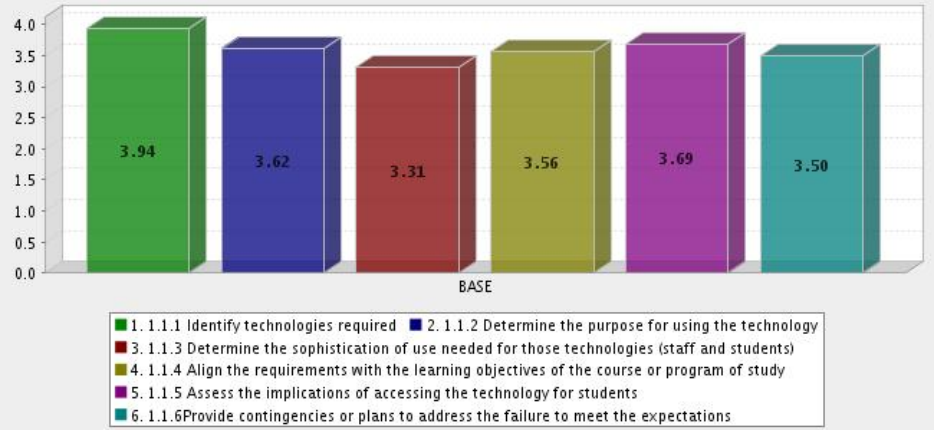
1.1 Defining Rationale: How does the IHE identify the rationale for technology expectations made of students? **What is the importance of these Best Practices at Your Institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	1.1.1 Identify technologies required	16	4.250	
2.	1.1.2 Determine the purpose for using the technology	16	4.062	
3.	1.1.3 Determine the sophistication of use needed for those technologies (staff and students)	16	4.188	
4.	1.1.4 Align the requirements with the learning objectives of the course or program of study	16	4.188	
5.	1.1.5 Assess the implications of accessing the technology for students	16	4.062	
6.	1.1.6 Provide contingencies or plans to address the failure to meet the expectations	16	3.938	
		Average	**4.115**	

To what degree are these Best Practices applied at your institution?



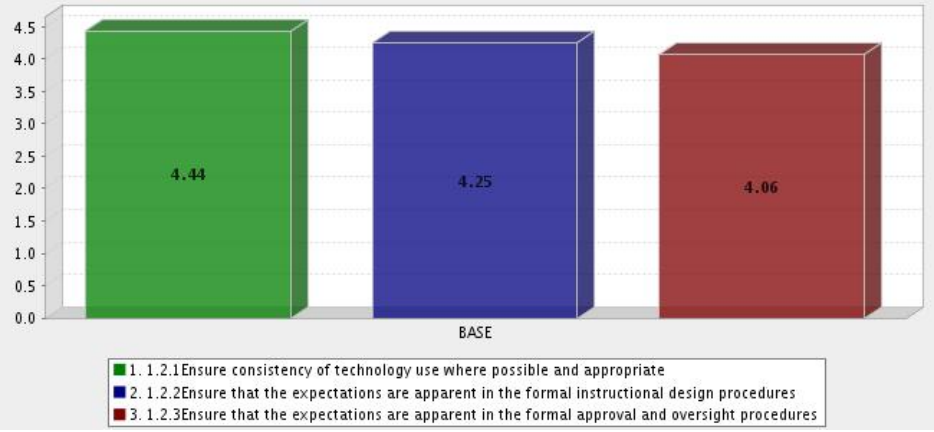
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	1.1.1 Identify technologies required	16	3.938					
2.	1.1.2 Determine the purpose for using the technology	16	3.625					
3.	1.1.3 Determine the sophistication of use needed for those technologies (staff and students)	16	3.312					
4.	1.1.4 Align the requirements with the learning objectives of the course or program of study	16	3.562					
5.	1.1.5 Assess the implications of accessing the technology for students	16	3.688					
6.	1.1.6 Provide contingencies or plans to address the failure to meet the expectations	16	3.500					
		Average	**3.604**					

Comments Related to BPA 1.1?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	Our institution needs to do a better job working with instructors.
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

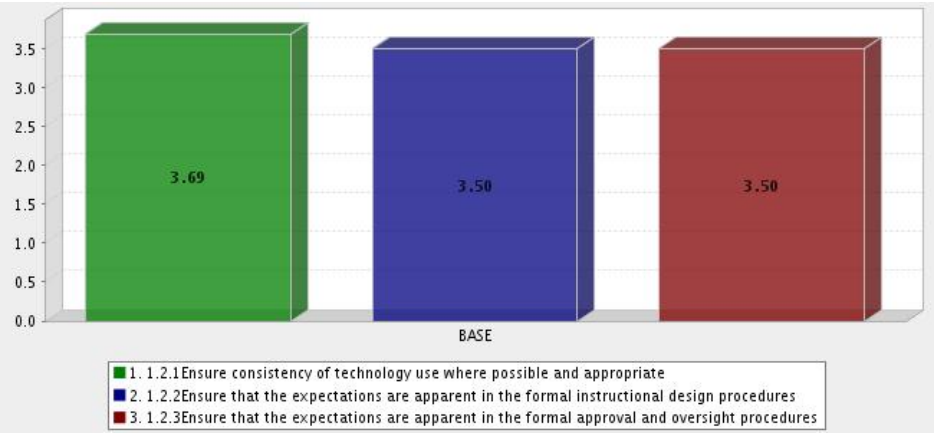
1.2 Systems and Processes: How does the IHE incorporate technology expectations in formal systems, processes, and policies? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	1.2.1 Ensure consistency of technology use where possible and appropriate	16	4.438					
2.	1.2.2 Ensure that the expectations are apparent in the formal instructional design procedures	16	4.250					
3.	1.2.3 Ensure that the expectations are apparent in the formal approval and oversight procedures	16	4.062					
		Average	**4.250**					

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

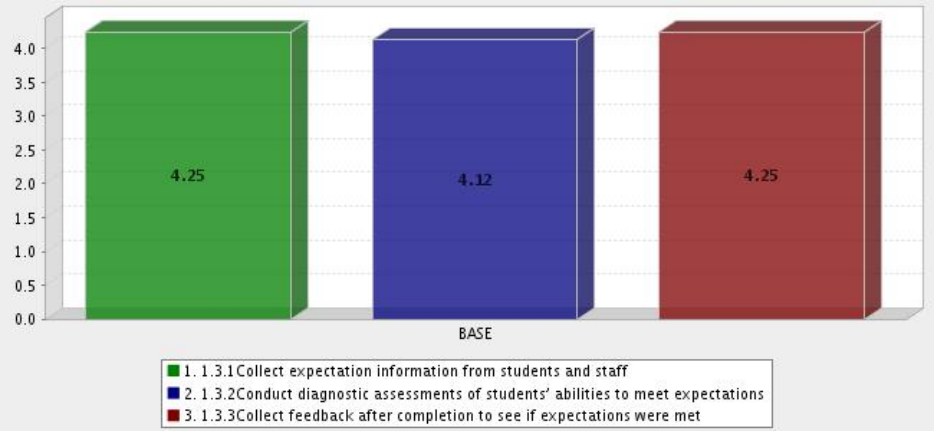
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	1.2.1 Ensure consistency of technology use where possible and appropriate	16	3.688					
2.	1.2.2 Ensure that the expectations are apparent in the formal instructional design procedures	16	3.500					
3.	1.2.3 Ensure that the expectations are apparent in the formal approval and oversight procedures	16	3.500					
		Average	**3.562**					

Comments related to BPA 1.2?

04/19/2010	12369666

05/04/2010	12544355	We have clearly defined categories of online learning which are used for all courses for staff and students.
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

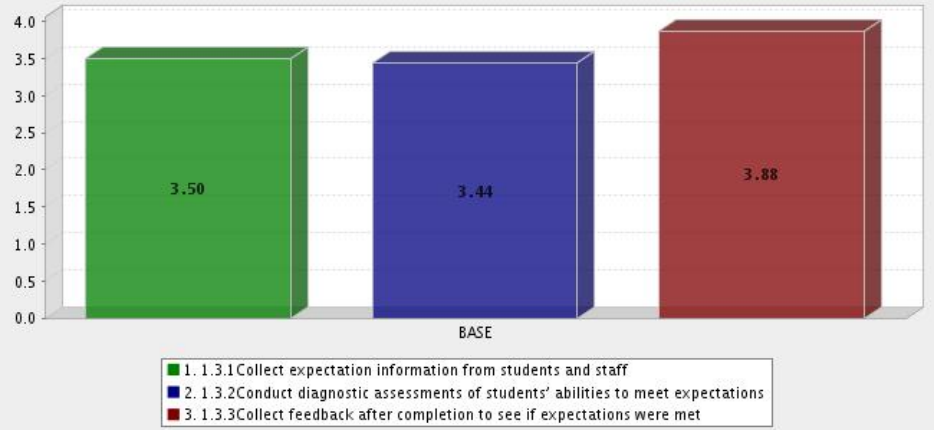
1.3 Student Expectations: How does the IHE identify student□s expectations? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	1.3.1 Collect expectation information from students and staff	16	4.250	
2.	1.3.2 Conduct diagnostic assessments of students' abilities to meet expectations	16	4.125	
3.	1.3.3 Collect feedback after completion to see if expectations were met	16	4.250	
		Average	**4.208**	

To what degree are these Best Practices applied at your institution?



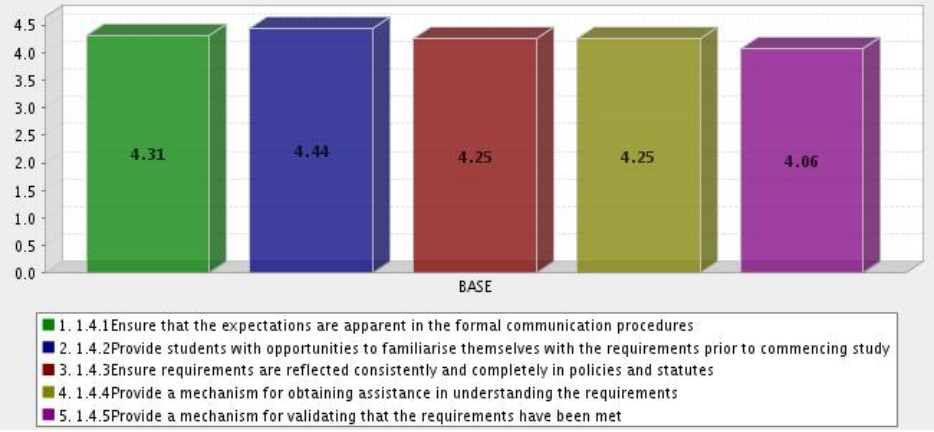
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	1.3.1 Collect expectation information from students and staff	16	3.500					
2.	1.3.2 Conduct diagnostic assessments of students' abilities to meet expectations	16	3.438					
3.	1.3.3 Collect feedback after completion to see if expectations were met	16	3.875					
		Average	**3.604**					

Comments related to BPA 1.3?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

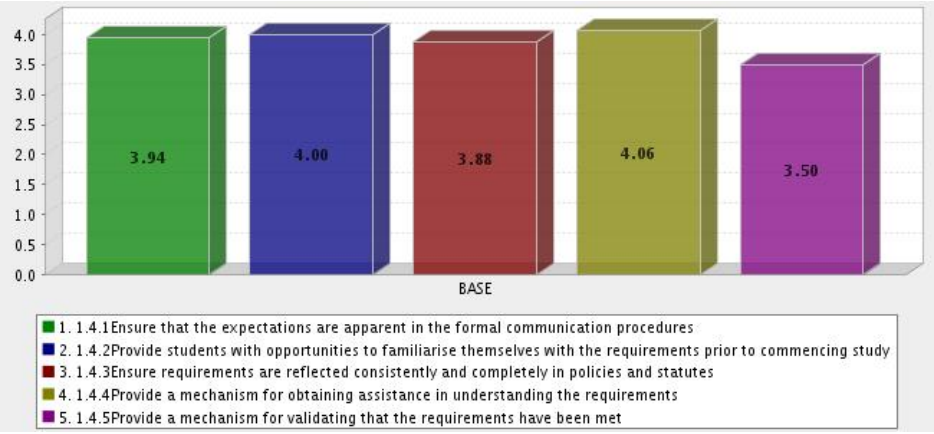
1.4 Communication: How does the IHE communicate technology expectations to students? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	1.4.1 Ensure that the expectations are apparent in the formal communication procedures	16	4.312					
2.	1.4.2 Provide students with opportunities to familiarise themselves with the requirements prior to commencing study	16	4.438					
3.	1.4.3 Ensure requirements are reflected consistently and completely in policies and statutes	16	4.250					
4.	1.4.4 Provide a mechanism for obtaining assistance in understanding the requirements	16	4.250					
5.	1.4.5 Provide a mechanism for validating that the requirements have been met	16	4.062					
		Average	**4.262**					

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

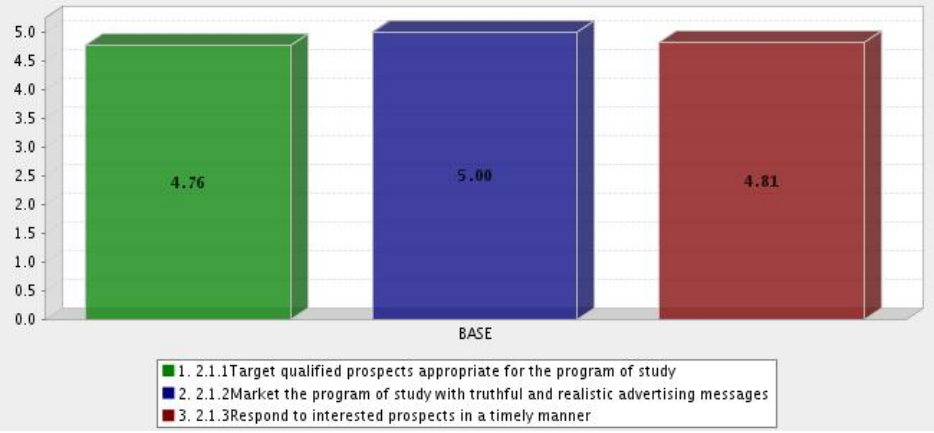
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	1.4.1 Ensure that the expectations are apparent in the formal communication procedures	16	3.938					
2.	1.4.2 Provide students with opportunities to familiarise themselves with the requirements prior to commencing study	16	4.000					
3.	1.4.3 Ensure requirements are reflected consistently and completely in policies and statutes	16	3.875					

4.	1.4.4 Provide a mechanism for obtaining assistance in understanding the requirements	16	4.062	
5.	1.4.5 Provide a mechanism for validating that the requirements have been met	16	3.500	
		Average	**3.875**	

Comments related to BPA 1.4?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

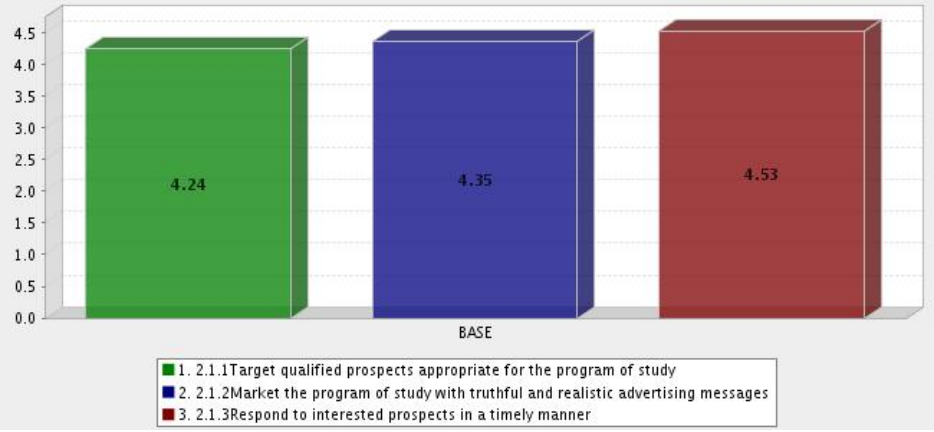
2.1 Recruitment: How do students learn about the e-learning program that is appropriate for their learning objectives and qualifications? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	2.1.1 Target qualified prospects appropriate for the program of study	17	4.765	
2.	2.1.2 Market the program of study with truthful and realistic advertising messages	17	5.000	
3.	2.1.3 Respond to interested prospects in a timely manner	16	4.812	
		Average	**4.859**	

To what degree are these Best Practices applied at your institution?



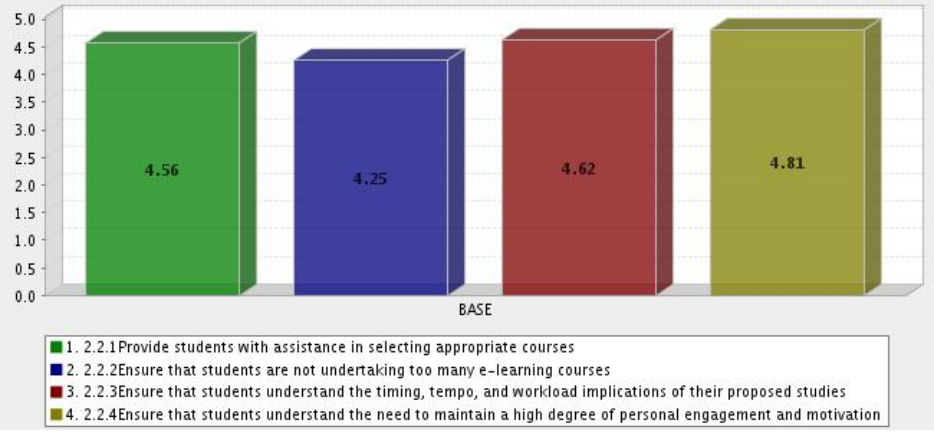
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	2.1.1 Target qualified prospects appropriate for the program of study	17	4.235					
2.	2.1.2 Market the program of study with truthful and realistic advertising messages	17	4.353					
3.	2.1.3 Respond to interested prospects in a timely manner	17	4.529					
		Average	**4.373**					

Comments related to BPA 2.1?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	We outsource.
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

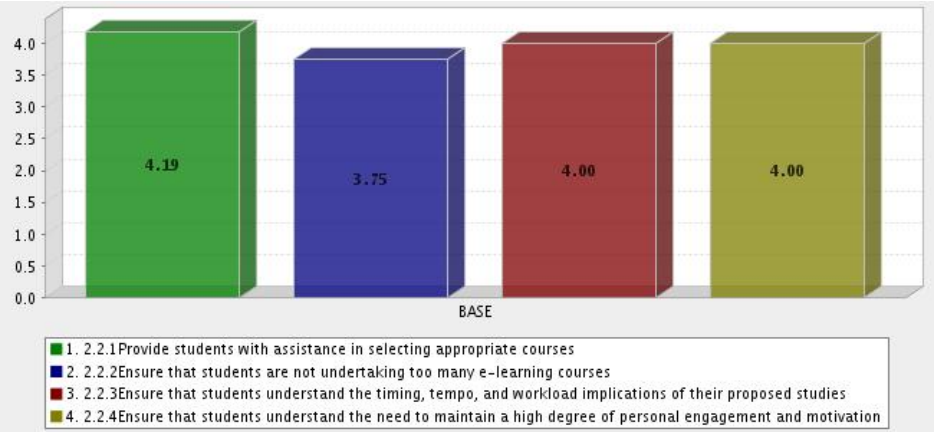
2.2 Advisement: How are students advised on their proposed studies? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	2.2.1 Provide students with assistance in selecting appropriate courses	16	4.562					
2.	2.2.2 Ensure that students are not undertaking too many e-learning courses	16	4.250					
3.	2.2.3 Ensure that students understand the timing, tempo, and workload implications of their proposed studies	16	4.625					
4.	2.2.4 Ensure that students understand the need to maintain a high degree of personal engagement and motivation	16	4.812					
		Average	**4.562**					

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

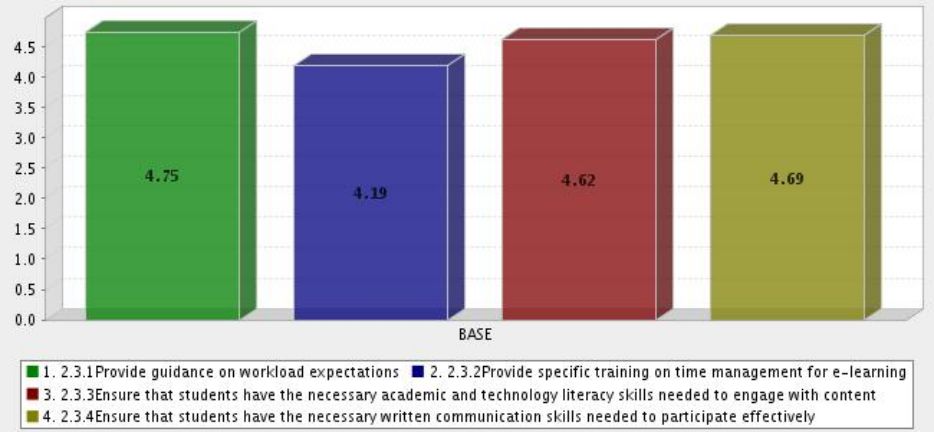
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	2.2.1 Provide students with assistance in selecting appropriate courses	16	4.188					
2.	2.2.2 Ensure that students are not undertaking too many e-learning courses	16	3.750					
3.	2.2.3 Ensure that students understand the timing, tempo, and workload implications of their proposed studies	16	4.000					

4.	2.2.4 Ensure that students understand the need to maintain a high degree of personal engagement and motivation	16	4.000	
		Average	**3.984**	

Comments related to BPA 2.2?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

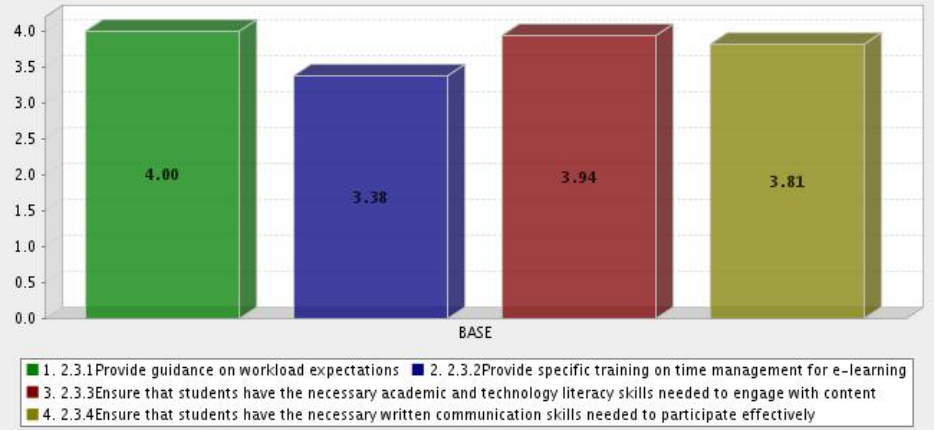
2.3 Assessment: How are students assessed for readiness and appropriateness for e-learning? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	2.3.1 Provide guidance on workload expectations	16	4.750	
2.	2.3.2 Provide specific training on time management for e-learning	16	4.188	
3.	2.3.3 Ensure that students have the necessary academic and technology literacy skills needed to engage with content	16	4.625	
4.	2.3.4 Ensure that students have the necessary written communication skills needed to participate effectively	16	4.688	
		Average	**4.562**	

To what degree are these Best Practices applied at your institution?



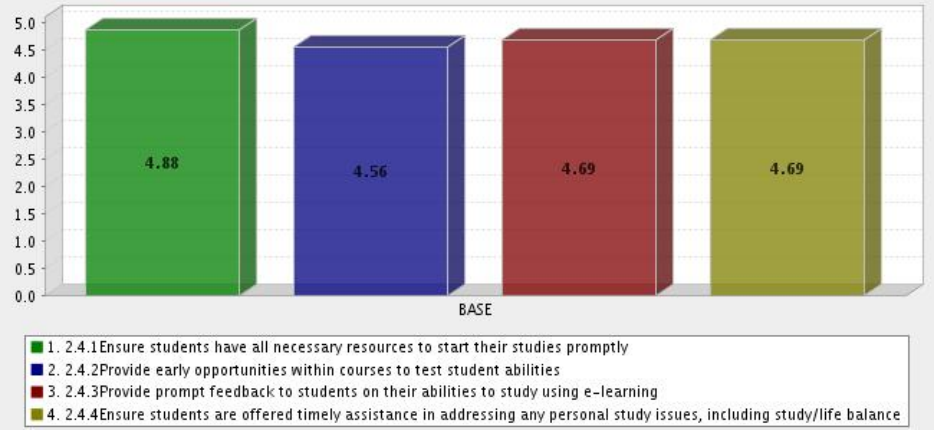
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	2.3.1 Provide guidance on workload expectations	16	4.000					
2.	2.3.2 Provide specific training on time management for e-learning	16	3.375					
3.	2.3.3 Ensure that students have the necessary academic and technology literacy skills needed to engage with content	16	3.938					
4.	2.3.4 Ensure that students have the necessary written communication skills needed to participate effectively	16	3.812					
		Average	**3.781**					

Comments related to BPA 2.3?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

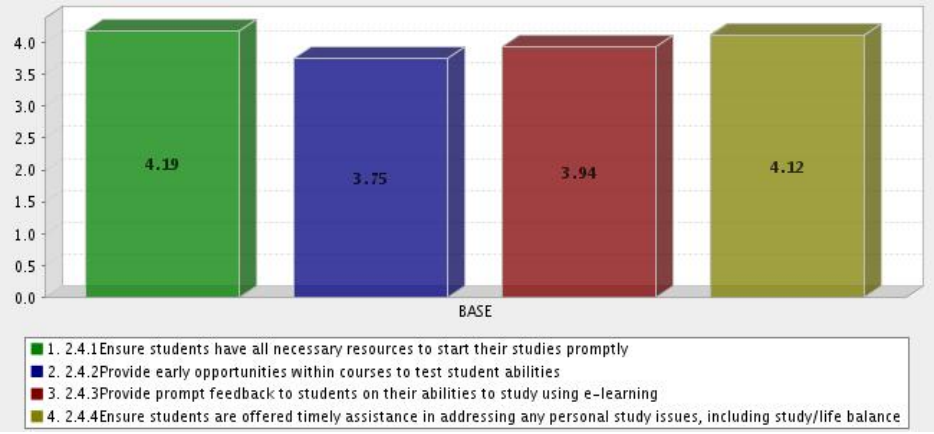
2.4 Diagnosis: What early diagnosis procedures are in place? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	2.4.1 Ensure students have all necessary resources to start their studies promptly	16	4.875					
2.	2.4.2 Provide early opportunities within courses to test student abilities	16	4.562					
3.	2.4.3 Provide prompt feedback to students on their abilities to study using e-learning	16	4.688					
4.	2.4.4 Ensure students are offered timely assistance in addressing any personal study issues, including study/life balance	16	4.688					
		Average	**4.703**					

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

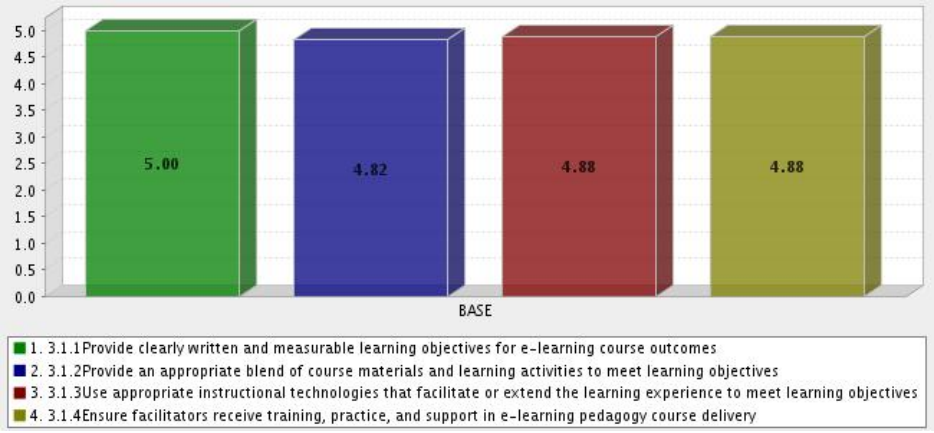
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	2.4.1 Ensure students have all necessary resources to start their studies promptly	16	4.188					
2.	2.4.2 Provide early opportunities within courses to test student abilities	16	3.750					
3.	2.4.3 Provide prompt feedback to students on their abilities to study using e-learning	16	3.938					
4.	2.4.4 Ensure students are offered timely assistance in addressing any personal study issues, including study/life balance	16	4.125					

	Average	**4.000**

Comments related to BPA 2.4?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12611151	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/18/2010	12627742	

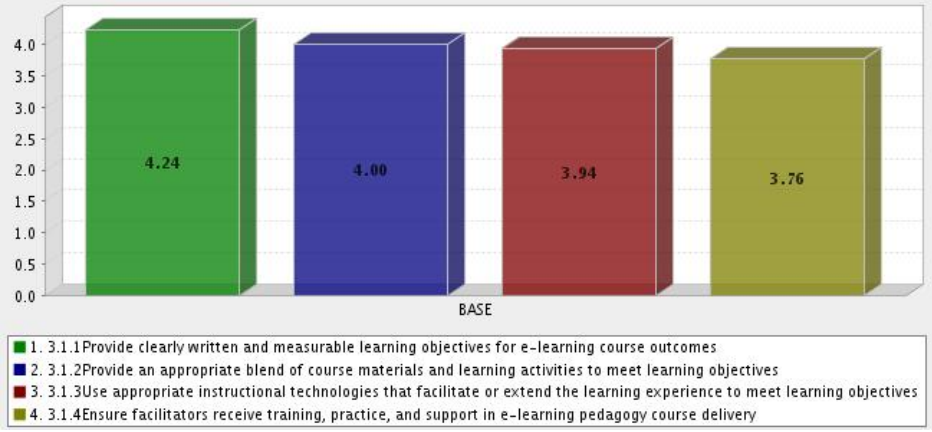
3.1 Pedagogy: Is the design of the e-learning courses supported by pedagogical underpinnings? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	3.1.1 Provide clearly written and measurable learning objectives for e-learning course outcomes	17	5.000	
2.	3.1.2 Provide an appropriate blend of course materials and learning activities to meet learning objectives	17	4.824	
3.	3.1.3 Use appropriate instructional technologies that facilitate or extend the learning experience to meet learning objectives	17	4.882	
4.	3.1.4 Ensure facilitators receive training, practice, and support in e-learning pedagogy course delivery	17	4.882	
		Average	**4.897**	

To what degree are these Best Practices applied at your institution?



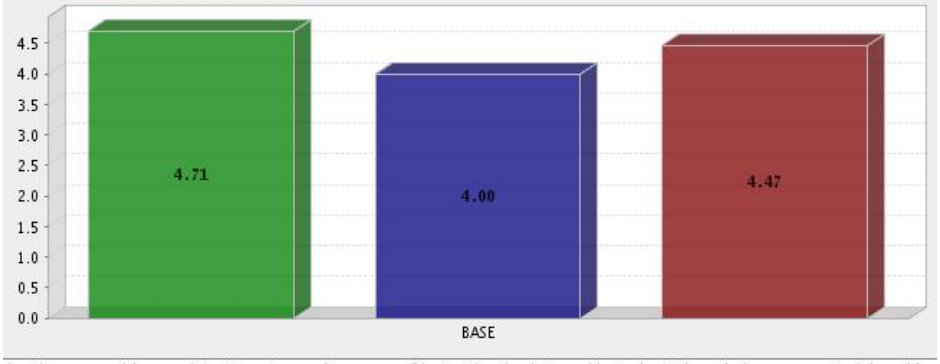
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	3.1.1 Provide clearly written and measurable learning objectives for e-learning course outcomes	17	4.235					
2.	3.1.2 Provide an appropriate blend of course materials and learning activities to meet learning objectives	17	4.000					
3.	3.1.3 Use appropriate instructional technologies that facilitate or extend the learning experience to meet learning objectives	17	3.941					
4.	3.1.4 Ensure facilitators receive training, practice, and support in e-learning pedagogy course delivery	17	3.765					
		Average	**3.985**					

Comments related to BPA 3.1?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	This is done at the department level and there does not appear to be much oversight.
05/18/2010	12627742	

3.2 Learner-Centered: How does the IHE provide a learning experience that is more learner-centered? **Importance of Best Practices?**

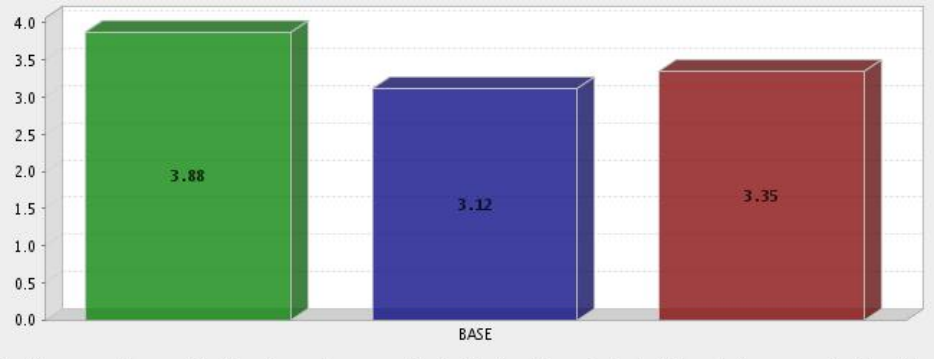


ize the course with a consistent structure and sequence of instructional units to guide students through the course materials and lea
or study time to ensure study load is appropriate for course and learner characteristics
e learning design supports a range of learning styles, multiple instructional methods, and active learning opportunities

Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	3.2.1 Organize the course with a consistent structure and sequence of instructional units to guide students through the course materials and learning activities	17	4.706					
2.	3.2.2 Monitor study time to ensure study load is appropriate for course and learner characteristics	17	4.000					
3.	3.2.3 Ensure learning design supports a range of learning styles, multiple instructional methods, and active learning opportunities	17	4.471					
		Average	**4.392**					

To what degree are these Best Practices applied at your institution?



ize the course with a consistent structure and sequence of instructional units to guide students through the course materials and lea
or study time to ensure study load is appropriate for course and learner characteristics
e learning design supports a range of learning styles, multiple instructional methods, and active learning opportunities

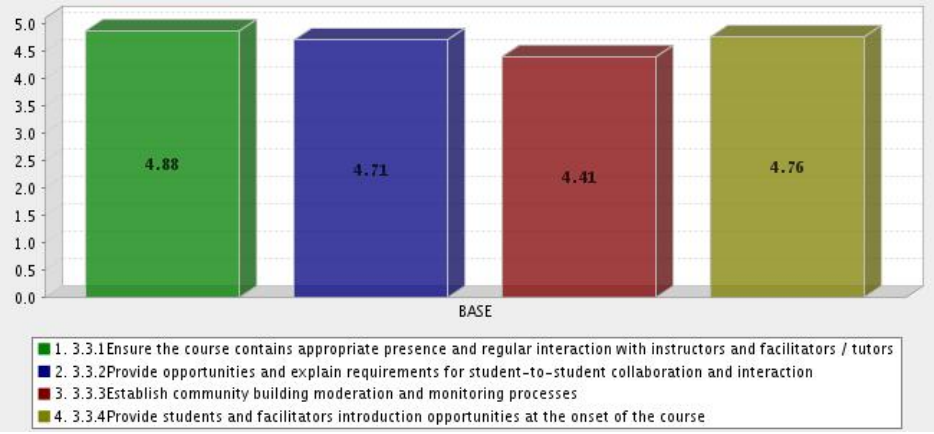
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	3.2.1 Organize the course with a consistent structure and sequence of instructional units to guide students through the course materials and learning activities	17	3.882					
2.	3.2.2 Monitor study time to ensure study load is appropriate for course and learner characteristics	17	3.118					
3.	3.2.3 Ensure learning design supports a range of learning styles, multiple instructional methods, and active learning opportunities	17	3.353					
		Average	**3.451**					

Comments related to BPA 3.2?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

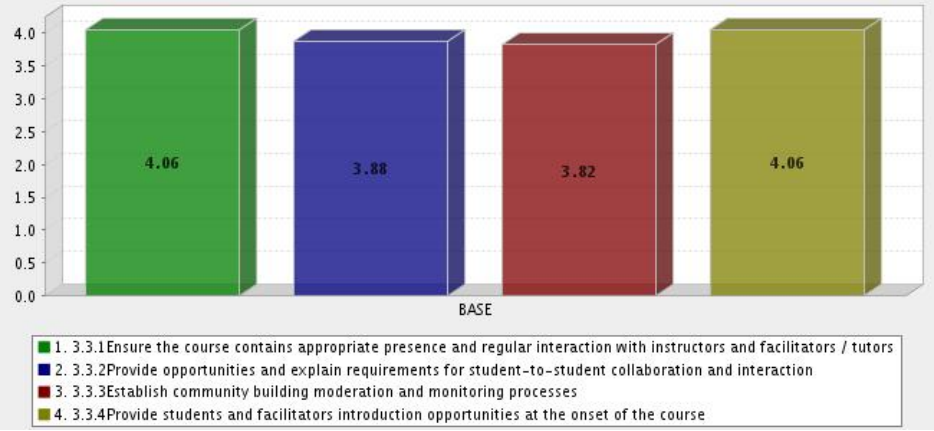
3.3 Community Building: How does the IHE promote learner engagement and community building? **Importance of Best Practices?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	3.3.1 Ensure the course contains appropriate presence and regular interaction with instructors and facilitators / tutors	17	4.882	
2.	3.3.2 Provide opportunities and explain requirements for student-to-student collaboration and interaction	17	4.706	
3.	3.3.3 Establish community building moderation and monitoring processes	17	4.412	
4.	3.3.4 Provide students and facilitators introduction opportunities at the onset of the course	17	4.765	
		Average	**4.691**	

To what degree are these Best Practices applied at your institution?



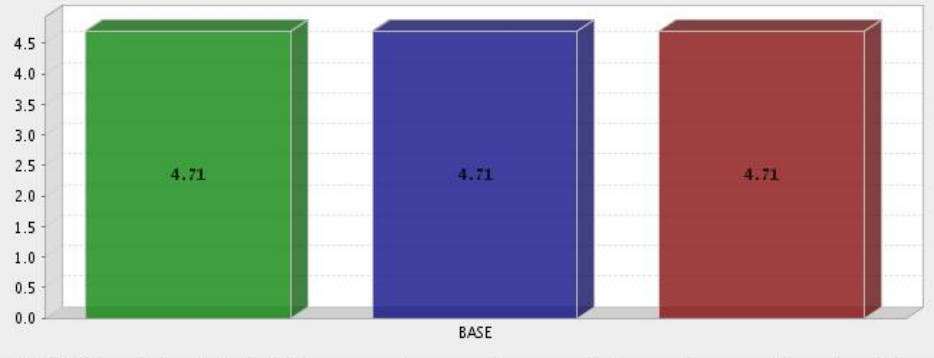
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	3.3.1 Ensure the course contains appropriate presence and regular interaction with instructors and facilitators / tutors	17	4.059					
2.	3.3.2 Provide opportunities and explain requirements for student-to-student collaboration and interaction	17	3.882					
3.	3.3.3 Establish community building moderation and monitoring processes	17	3.824					
4.	3.3.4 Provide students and facilitators introduction opportunities at the onset of the course	17	4.059					
		Average	**3.956**					

Comments related to BPA 3.3?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

3.4 Designed for Retention: How does e-learning design contribute to student retention? **Importance of Best Practices?**

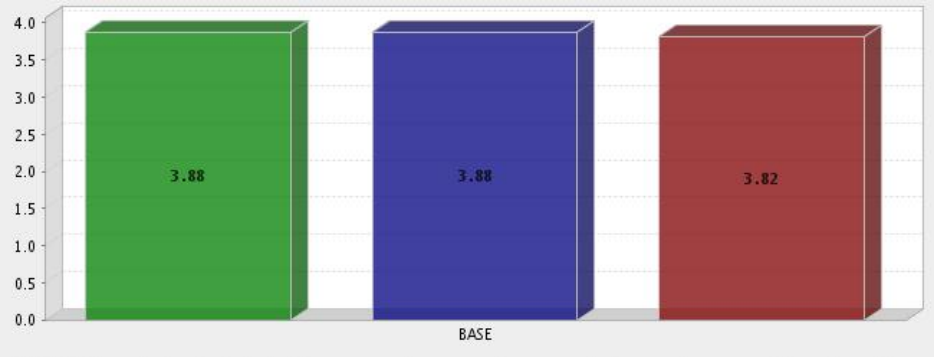


. 3.4.1Establish mechanisms to track student progress and success such as course milestones, performance metrics, and reporting
. 3.4.2Provide mechanisms to assist students who struggle with learning activities and performance
. 3.4.3Use a consistent e-learning course template with provisions to provide accessible course contents for students with special nee

Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	3.4.1 Establish mechanisms to track student progress and success such as course milestones, performance metrics, and reporting	17	4.706					
2.	3.4.2 Provide mechanisms to assist students who struggle with learning activities and performance	17	4.706					
3.	3.4.3 Use a consistent e-learning course template with provisions to provide accessible course contents for students with special needs	17	4.706					
		Average	**4.706**					

To what degree are these Best Practices applied at your institution?



. 3.4.1Establish mechanisms to track student progress and success such as course milestones, performance metrics, and reporting
. 3.4.2Provide mechanisms to assist students who struggle with learning activities and performance
. 3.4.3Use a consistent e-learning course template with provisions to provide accessible course contents for students with special nee

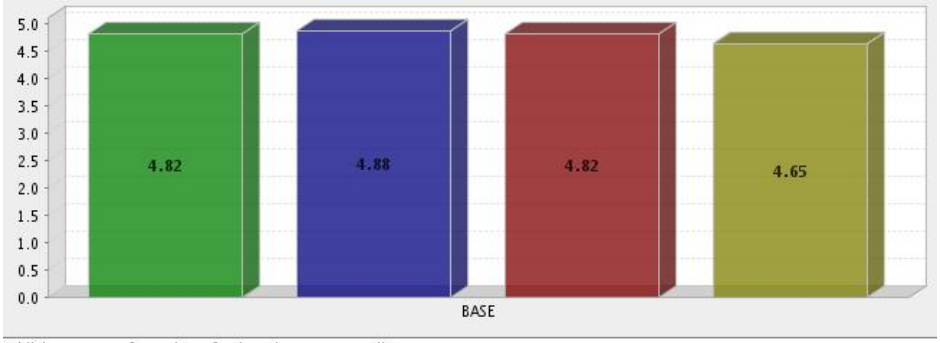
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	3.4.1 Establish mechanisms to track student progress and success such as course milestones, performance metrics, and reporting	17	3.882					
2.	3.4.2 Provide mechanisms to assist students who struggle with learning activities and performance	17	3.882					
3.	3.4.3 Use a consistent e-learning course template with provisions to provide accessible course contents for students with special needs	17	3.824					
		Average	**3.863**					

Comments related to BPA 3.4?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

3.5 Evaluation: How does the IHE provide assessment feedback and evaluation of the course and student performance? **Importance of Best Practices?**

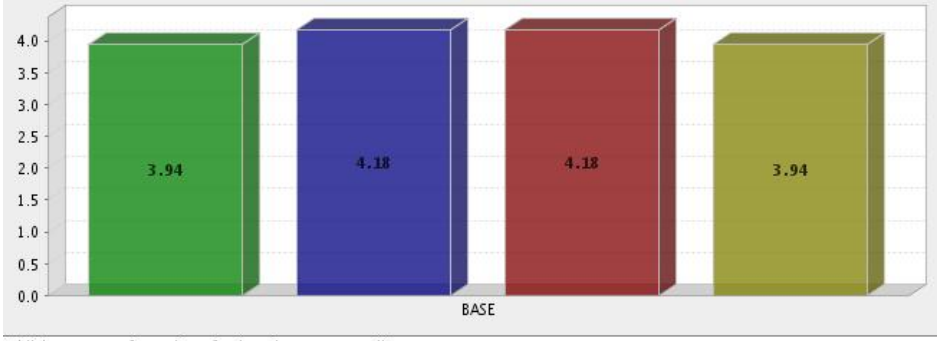


tablish processes for review of e-learning course quality
ovide criteria for student evaluation of work and course grading and calculation methods
tablish mechanisms for students to evaluate e-learning course effectiveness and satisfaction
tablish and communicate service levels for facilitator availability, responsiveness, and feedback to students about achievement and p

Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	3.5.1 Establish processes for review of e-learning course quality	17	4.824					
2.	3.5.2 Provide criteria for student evaluation of work and course grading and calculation methods	17	4.882					
3.	3.5.3 Establish mechanisms for students to evaluate e-learning course effectiveness and satisfaction	17	4.824					
4.	3.5.4 Establish and communicate service levels for facilitator availability, responsiveness, and feedback to students about achievement and performance	17	4.647					
		Average	**4.794**					

To what degree are these Best Practices applied at your institution?



tablish processes for review of e-learning course quality
ovide criteria for student evaluation of work and course grading and calculation methods
tablish mechanisms for students to evaluate e-learning course effectiveness and satisfaction
tablish and communicate service levels for facilitator availability, responsiveness, and feedback to students about achievement and p

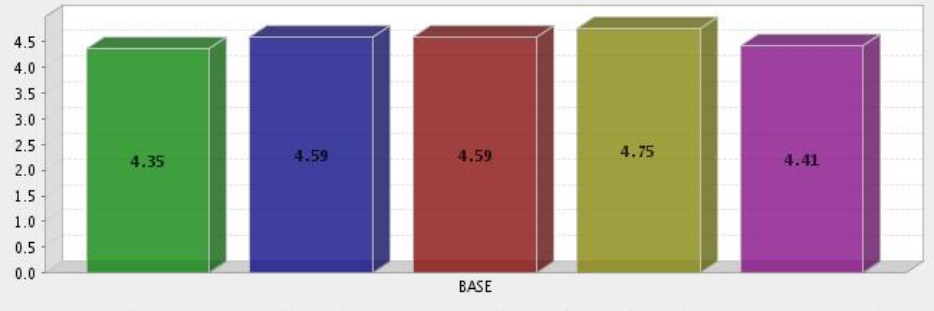
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	3.5.1 Establish processes for review of e-learning course quality	17	3.941					
2.	3.5.2 Provide criteria for student evaluation of work and course grading and calculation methods	17	4.176					
3.	3.5.3 Establish mechanisms for students to evaluate e-learning course effectiveness and satisfaction	17	4.176					
4.	3.5.4 Establish and communicate service levels for facilitator availability, responsiveness, and feedback to students about achievement and performance	17	3.941					
		Average	**4.059**					

Comments related to BPA 3.5?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

4.1 Technology Infrastructure: How does the IHE ensure it has provided the technology infrastructure for e-Learning? **What is the importance of these Best Practices at your institution?**

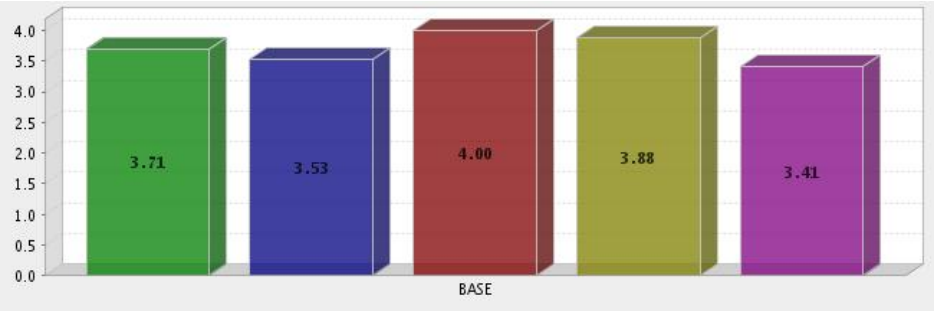


ity to address institutional needs, trends in student use/expectations, the fit with the culture of the campus/community, ability to pr
students
and instructors, access to course materials, student assessment and feedback/grades
ure
goal and the intended audience for the system

Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	4.1.1 Evaluate and choose technology via a formal process that explores the system's capacity to address institutional needs, trends in student use/expectations, the fit with the culture of the campus/community, ability to provide measureable learning outcomes and how it increases efficiency, effectiveness and access	17	4.353					
2.	4.1.2 Provide services and assistive technologies to support the learning needs of disabled students	17	4.588					
3.	4.1.3 Determine that technology system provide tools for communication between students and instructors, access to course materials, student assessment and feedback/grades	17	4.588					
4.	4.1.4 Provide staff and resources to support and maintain technical systems and infrastructure	16	4.750					
5.	4.1.5 Evaluate the technology frequently based on its intended purpose of the software and goal and the intended audience for the system	17	4.412					
		Average	**4.538**					

To what degree are these Best Practices applied at your institution?



ity to address institutional needs, trends in student use/expectations, the fit with the culture of the campus/community, ability to pr
students
and instructors, access to course materials, student assessment and feedback/grades
ure
goal and the intended audience for the system

Overall Matrix Scorecard

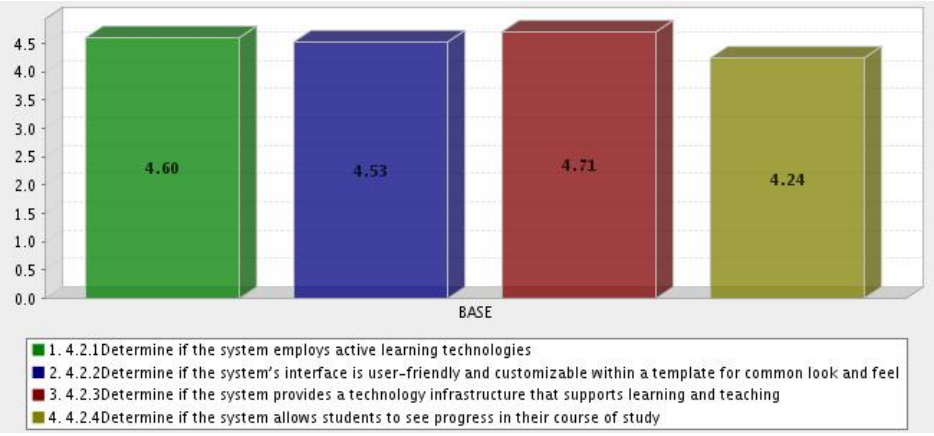
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied

1.	4.1.1 Evaluate and choose technology via a formal process that explores the system's capacity to address institutional needs, trends in student use/expectations, the fit with the culture of the campus/community, ability to provide measureable learning outcomes and how it increases efficiency, effectiveness and access	17	3.706	
2.	4.1.2 Provide services and assistive technologies to support the learning needs of disabled students	17	3.529	
3.	4.1.3 Determine that technology system provide tools for communication between students and instructors, access to course materials, student assessment and feedback/grades	17	4.000	
4.	4.1.4 Provide staff and resources to support and maintain technical systems and infrastructure	17	3.882	
5.	4.1.5 Evaluate the technology frequently based on its intended purpose of the software and goal and the intended audience for the system	17	3.412	
		Average	**3.706**	

Comments related to BPA 4.1?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	Changes in systems without faculty or student input is frequent. Without consulting faculty and students in on-line programs, technology support was eliminated during weekend and evening hours - those times when on-line activity is greatest is when support is not present. These issues cause significant problems for both faculty and students.

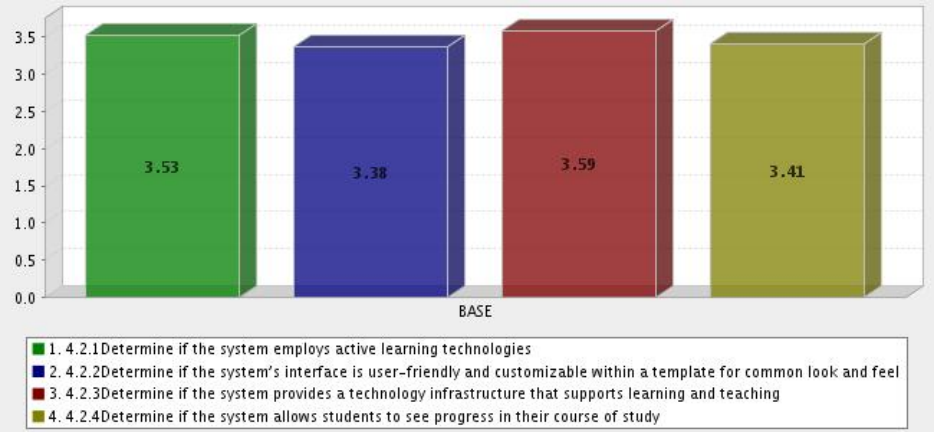
4.2 Front-End Functionality: How does the IHE assure the front-end interface and functionality? **What is the importance of these Best Practices at your institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	4.2.1 Determine if the system employs active learning technologies	15	4.600					
2.	4.2.2 Determine if the system's interface is user-friendly and customizable within a template for common look and feel	17	4.529					
3.	4.2.3 Determine if the system provides a technology infrastructure that supports learning and teaching	17	4.706					
4.	4.2.4 Determine if the system allows students to see progress in their course of study	17	4.235					
		Average	**4.518**					

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

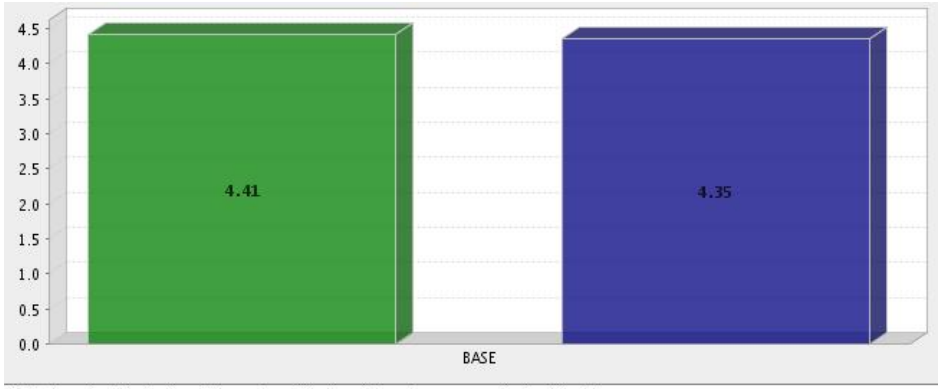
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	4.2.1 Determine if the system employs active learning technologies	15	3.533					
2.	4.2.2 Determine if the system's interface is user-friendly and customizable within a template for common look and feel	16	3.375					
3.	4.2.3 Determine if the system provides a technology infrastructure that supports learning and teaching	17	3.588					
4.	4.2.4 Determine if the system allows students to see progress in their course of study	17	3.412					
		Average	**3.477**					

Comments related to BPA 4.2?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	

05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

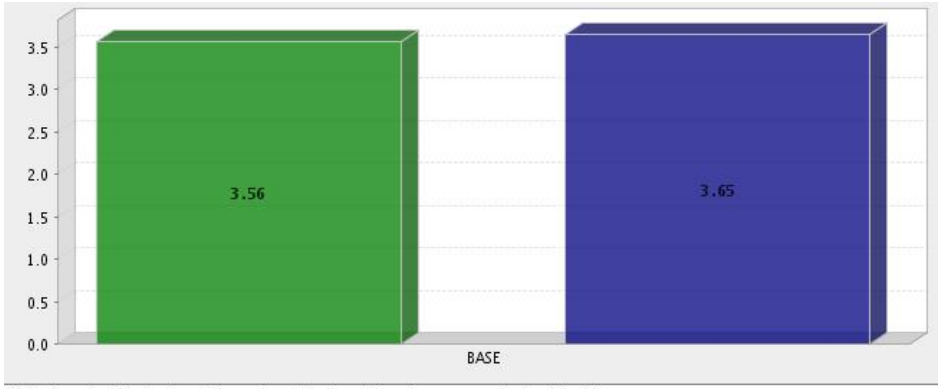
4.3 Back-End Functionality: How does the IHE assure the back-end interface and functionality? **What is the importance of these Best Practices at your institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	4.3.1 Determine if technology integrates with other data systems as needed by the IHE	17	4.412					
2.	4.3.2 Determine if technology integrates adequately with other campus resources, such as library and registration, to support student needs	17	4.353					
		Average	**4.382**					

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

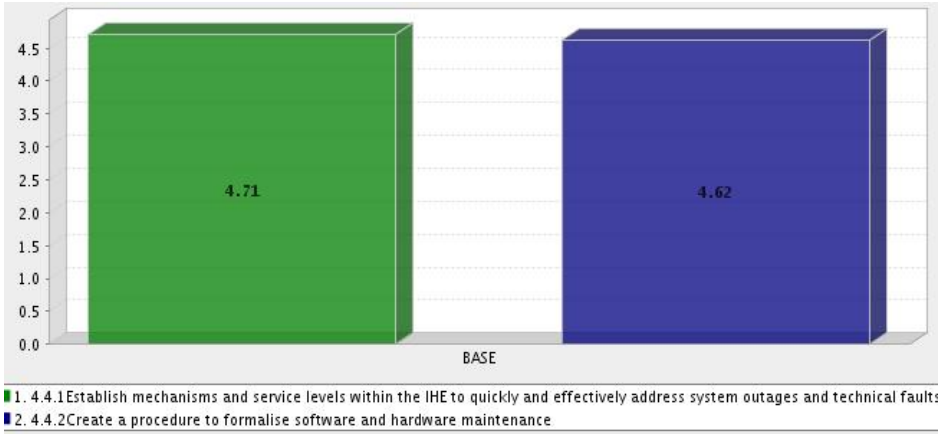
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	4.3.1 Determine if technology integrates with other data systems as needed by the IHE	16	3.562					

2.	4.3.2 Determine if technology integrates adequately with other campus resources, such as library and registration, to support student needs	17	3.647	
		Average	**3.605**	

Comments related to BPA 4.3?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

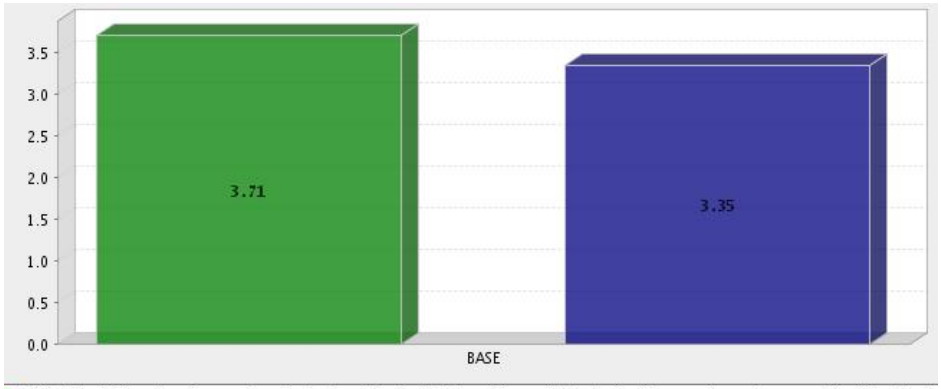
4.4 IT Support: How does the IHE respond to system outages and technical issues? **What is the importance of these Best Practices at your institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	4.4.1 Establish mechanisms and service levels within the IHE to quickly and effectively address system outages and technical faults	17	4.706					
2.	4.4.2 Create a procedure to formalise software and hardware maintenance	16	4.625					
		Average	**4.665**					

To what degree are these Best Practices applied at your institution?



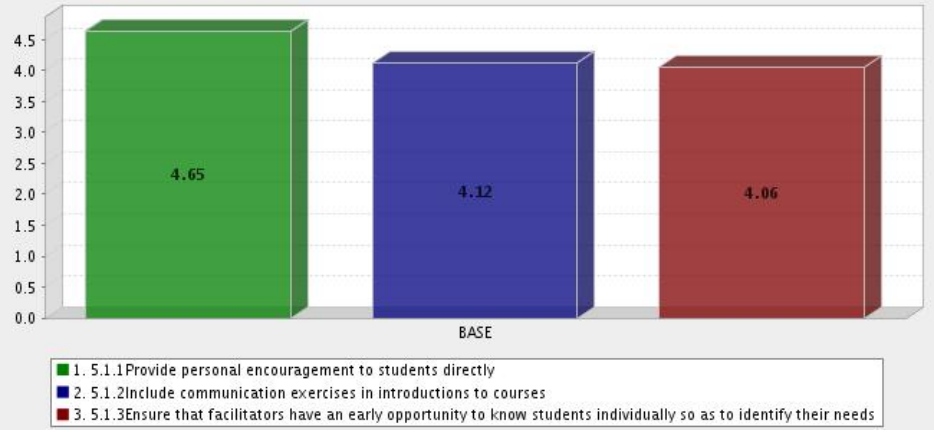
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	4.4.1 Establish mechanisms and service levels within the IHE to quickly and effectively address system outages and technical faults	17	3.706					
2.	4.4.2 Create a procedure to formalise software and hardware maintenance	17	3.353					
		Average	**3.529**					

Comments related to BPA 4.4?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

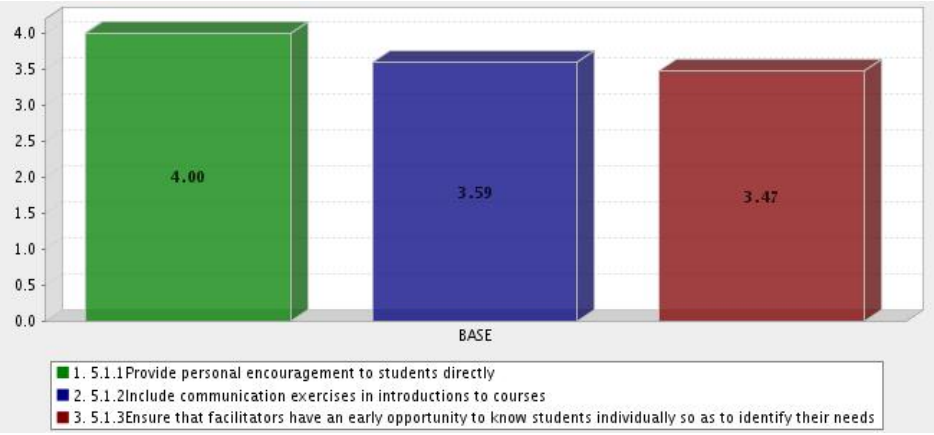
5.1 Technology Readiness: How does the IHE build student confidence with technology? **What is the importance of these Best Practices at your institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	5.1.1 Provide personal encouragement to students directly	17	4.647					
2.	5.1.2 Include communication exercises in introductions to courses	17	4.118					
3.	5.1.3 Ensure that facilitators have an early opportunity to know students individually so as to identify their needs	17	4.059					
		Average	**4.275**					

To what degree are these Best Practices applied at your institution?



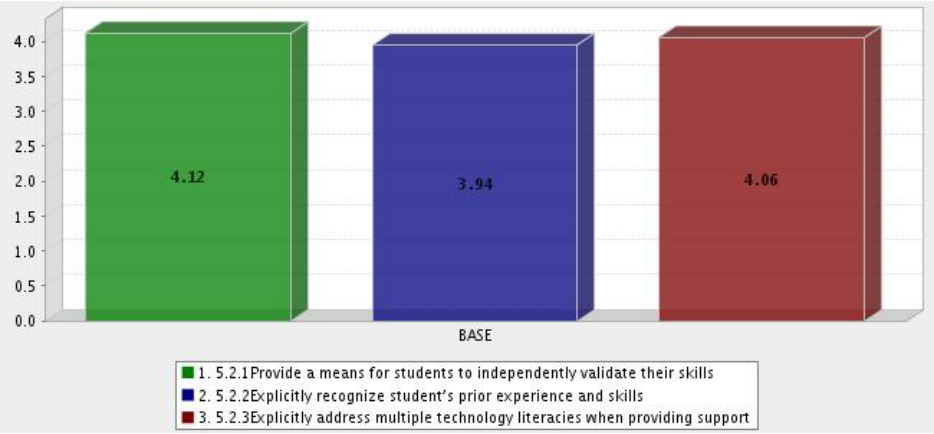
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	5.1.1 Provide personal encouragement to students directly	17	4.000					
2.	5.1.2 Include communication exercises in introductions to courses	17	3.588					
3.	5.1.3 Ensure that facilitators have an early opportunity to know students individually so as to identify their needs	17	3.471					
		Average	**3.686**					

Comments related to BPA 5.1?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

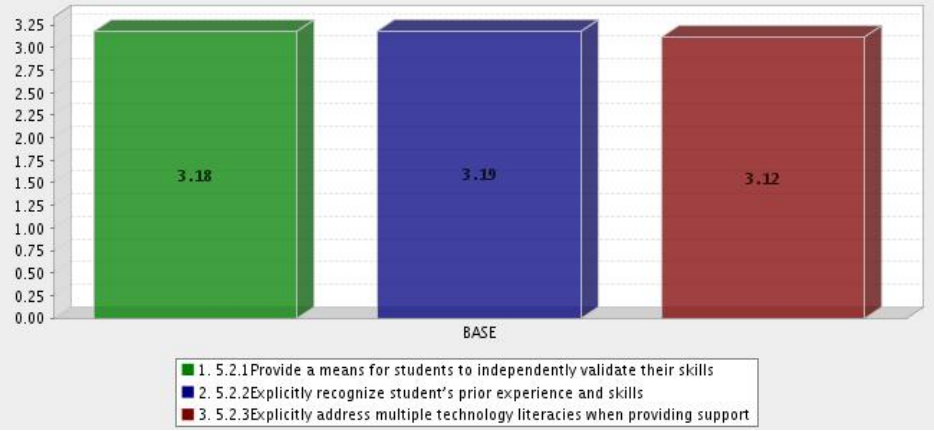
5.2 Skill Assessment: How does the IHE recognize student technology skills? **What is the importance of these Best Practices at your institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	5.2.1 Provide a means for students to independently validate their skills	16	4.125	
2.	5.2.2 Explicitly recognize student's prior experience and skills	17	3.941	
3.	5.2.3 Explicitly address multiple technology literacies when providing support	16	4.062	
		Average	**4.043**	

To what degree are these Best Practices applied at your institution?



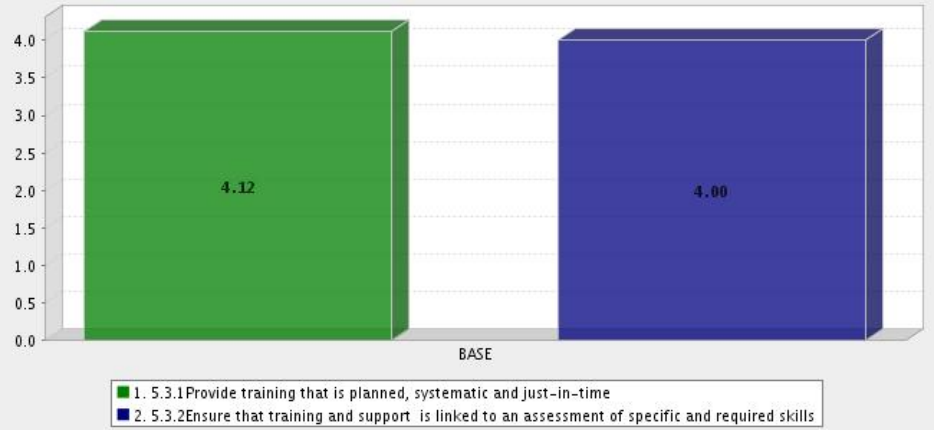
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	5.2.1 Provide a means for students to independently validate their skills	17	3.176					
2.	5.2.2 Explicitly recognize student's prior experience and skills	16	3.188					
3.	5.2.3 Explicitly address multiple technology literacies when providing support	17	3.118					
		Average	**3.161**					

Comments related to BPA 5.2?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

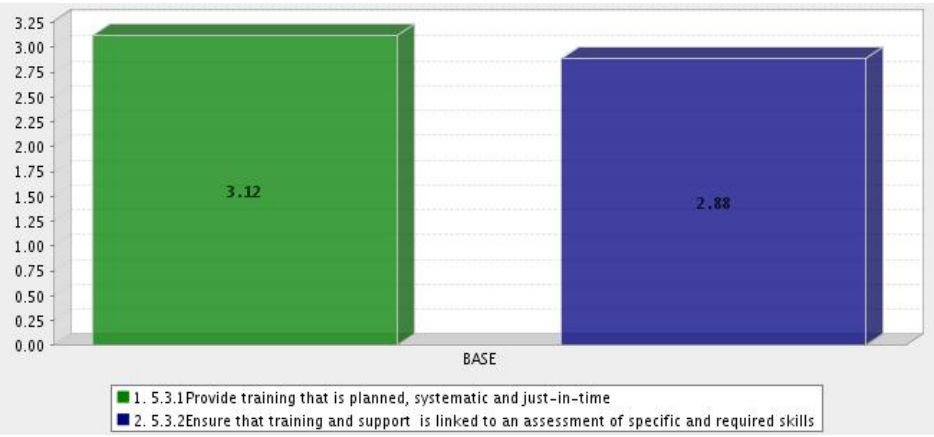
5.3 Remediation: How does the IHE remediate student skills? **What is the importance of these Best Practices at your institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	5.3.1 Provide training that is planned, systematic and just-in-time	17	4.118					
2.	5.3.2 Ensure that training and support is linked to an assessment of specific and required skills	17	4.000					
		Average	**4.059**					

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

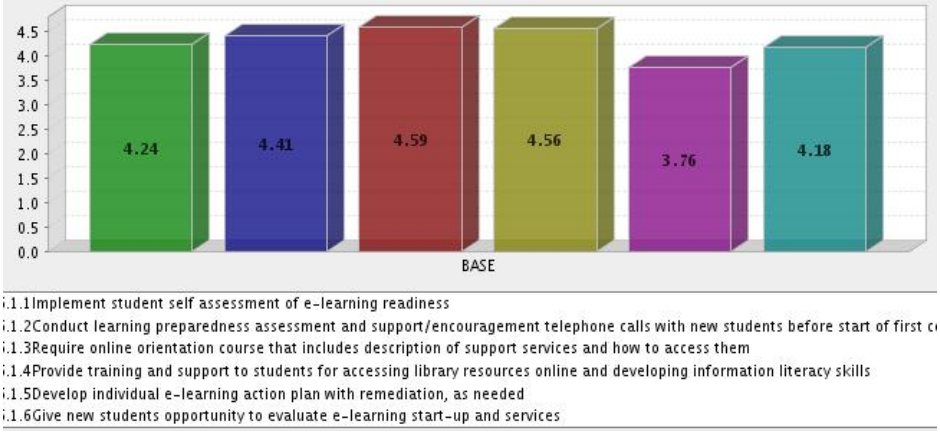
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	5.3.1 Provide training that is planned, systematic and just-in-time	17	3.118					
2.	5.3.2 Ensure that training and support is linked to an assessment of specific and required skills	17	2.882					
		Average	**3.000**					

Comments related to BPA 5.3?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	

05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

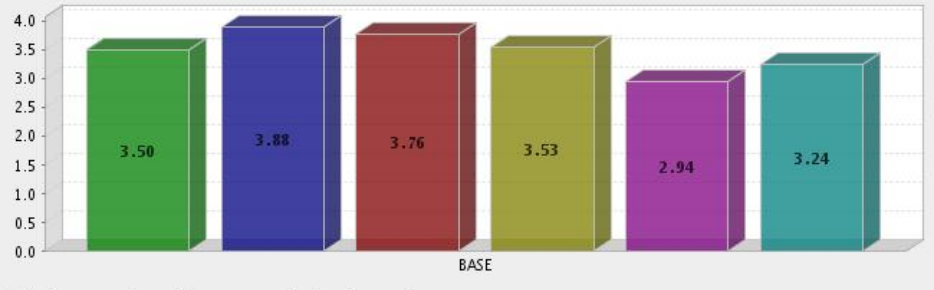
6.1 Orientation & Warning Systems: What systems are in place to advise students about support services and for early identification of at risk students? **What is the importance of these Best Practices at your institution?**



Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important 2 3 4 5 - Very Important
1.	6.1.1 Implement student self assessment of e-learning readiness	17	4.235	
2.	6.1.2 Conduct learning preparedness assessment and support/encouragement telephone calls with new students before start of first course	17	4.412	
3.	6.1.3 Require online orientation course that includes description of support services and how to access them	17	4.588	
4.	6.1.4 Provide training and support to students for accessing library resources online and developing information literacy skills	16	4.562	
5.	6.1.5 Develop individual e-learning action plan with remediation, as needed	17	3.765	
6.	6.1.6 Give new students opportunity to evaluate e-learning start-up and services	17	4.176	
		Average	**4.290**	

To what degree are these Best Practices applied at your institution?



6.1.1Implement student self assessment of e-learning readiness
6.1.2Conduct learning preparedness assessment and support/encouragement telephone calls with new students before start of first c
6.1.3Require online orientation course that includes description of support services and how to access them
6.1.4Provide training and support to students for accessing library resources online and developing information literacy skills
6.1.5Develop individual e-learning action plan with remediation, as needed
6.1.6Give new students opportunity to evaluate e-learning start-up and services

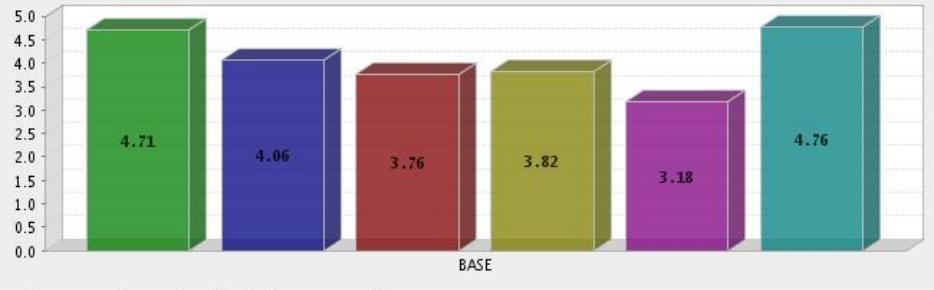
Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	6.1.1 Implement student self assessment of e-learning readiness	16	3.500					
2.	6.1.2 Conduct learning preparedness assessment and support/encouragement telephone calls with new students before start of first course	17	3.882					
3.	6.1.3 Require online orientation course that includes description of support services and how to access them	17	3.765					
4.	6.1.4 Provide training and support to students for accessing library resources online and developing information literacy skills	17	3.529					
5.	6.1.5 Develop individual e-learning action plan with remediation, as needed	17	2.941					
6.	6.1.6 Give new students opportunity to evaluate e-learning start-up and services	17	3.235					
		Average	**3.475**					

Comments related to BPA 6.1?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

6.2 Proactive Prevention: What proactive prevention strategies are in place to prevent students from dropping out? **What is the importance of these Best Practices at your institution?**

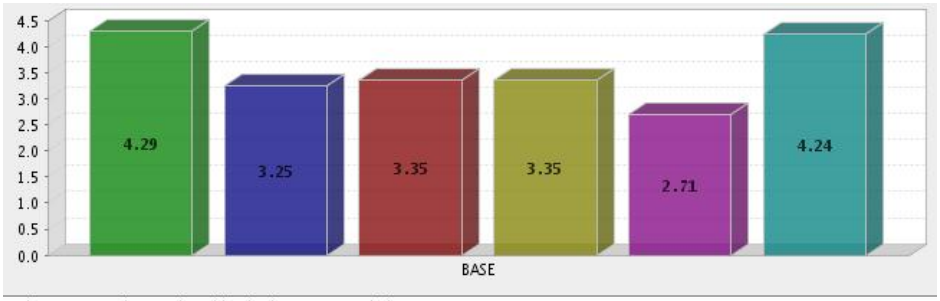


:s about expectations and workload prior to course choice
s time management, self-help, and organizational skills
nts by individual tutor (personal support counsellor / retention specialist / adjunct facilitator / mentor) by phone before first assignme
ntacts to predict those at risk and trigger interventions/referrals in a timely manner
er-to-peer or student ambassador support networks
valuation feedback for continuous improvement of services

Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	6.2.1 Advise students about expectations and workload prior to course choice	17	4.706					
2.	6.2.2 Teach students time management, self-help, and organizational skills	17	4.059					
3.	6.2.3 Contact students by individual tutor (personal support counsellor / retention specialist / adjunct facilitator / mentor) by phone before first assignment or assessment is due	17	3.765					
4.	6.2.4 Log student contacts to predict those at risk and trigger interventions/referrals in a timely manner	17	3.824					
5.	6.2.5 Implement peer-to-peer or student ambassador support networks	17	3.176					
6.	6.2.6 Use student evaluation feedback for continuous improvement of services	17	4.765					
		Average	**4.049**					

To what degree are these Best Practices applied at your institution?



:s about expectations and workload prior to course choice
s time management, self-help, and organizational skills
nts by individual tutor (personal support counsellor / retention specialist / adjunct facilitator / mentor) by phone before first assignme
ntacts to predict those at risk and trigger interventions/referrals in a timely manner
er-to-peer or student ambassador support networks
valuation feedback for continuous improvement of services

Overall Matrix Scorecard

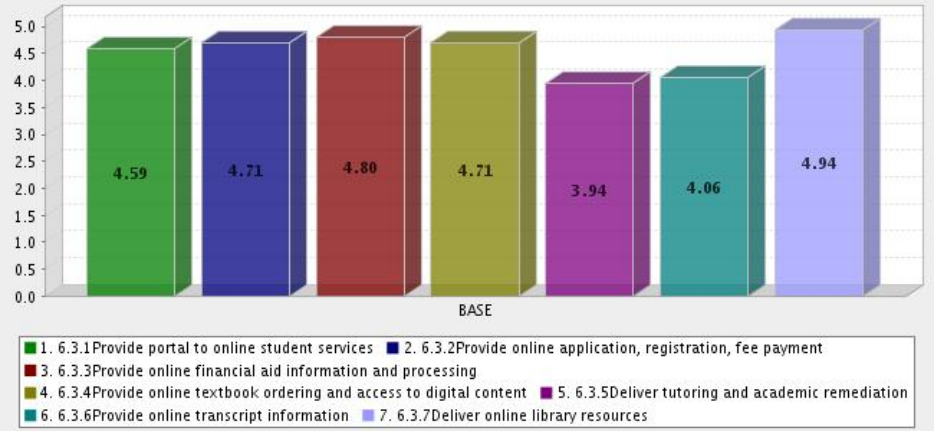
	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	6.2.1 Advise students about expectations and workload prior to course choice	17	4.294					
2.	6.2.2 Teach students time management, self-help, and organizational skills	16	3.250					

3.	6.2.3 Contact students by individual tutor (personal support counsellor / retention specialist / adjunct facilitator / mentor) by phone before first assignment or assessment is due	17	3.353	
4.	6.2.4 Log student contacts to predict those at risk and trigger interventions/referrals in a timely manner	17	3.353	
5.	6.2.5 Implement peer-to-peer or student ambassador support networks	17	2.706	
6.	6.2.6 Use student evaluation feedback for continuous improvement of services	17	4.235	
		Average	**3.532**	

Comments related to BPA 6.2?

04/19/2010	12369666	
05/04/2010	12544355	
05/06/2010	12562302	
05/11/2010	12594449	
05/11/2010	12595024	
05/12/2010	12602624	
05/13/2010	12609201	
05/14/2010	12612125	
05/14/2010	12612303	
05/14/2010	12613037	
05/16/2010	12617208	
05/17/2010	12619454	
05/17/2010	12619836	
05/17/2010	12621221	
05/17/2010	12619784	
05/17/2010	12611151	
05/18/2010	12627742	

6.3 Access to Student Services: Can e-learning students access the same services as on campus students? **What is the importance of these Best Practices at your institution?**

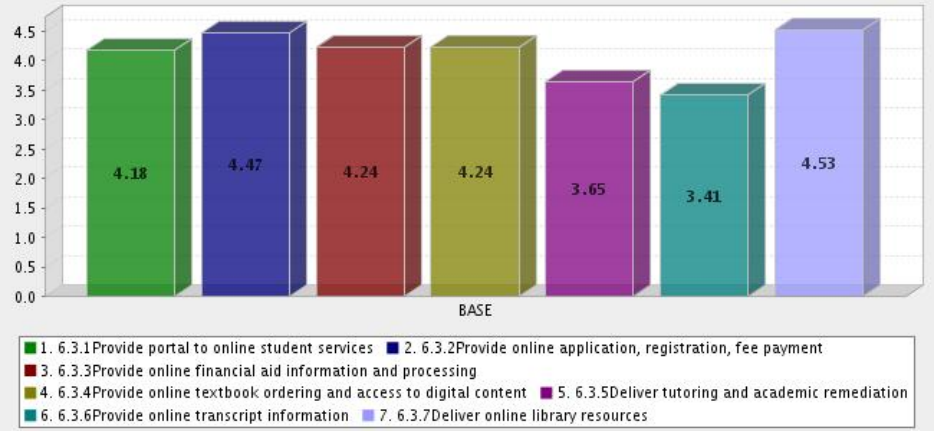


Overall Matrix Scorecard

	Question	Count	Score	1 - Not Important	2	3	4	5 - Very Important
1.	6.3.1 Provide portal to online student services	17	4.588					
2.	6.3.2 Provide online application, registration, fee payment	17	4.706					

3.	6.3.3 Provide online financial aid information and processing	15	4.800
4.	6.3.4 Provide online textbook ordering and access to digital content	17	4.706
5.	6.3.5 Deliver tutoring and academic remediation	17	3.941
6.	6.3.6 Provide online transcript information	17	4.059
7.	6.3.7 Deliver online library resources	17	4.941
		Average	**4.534**

To what degree are these Best Practices applied at your institution?



Overall Matrix Scorecard

	Question	Count	Score	1 - Dont Know	2 - Never Applied	3 - Inconsistently Applied	4 - Usually Applied	5 - Always Applied
1.	6.3.1 Provide portal to online student services	17	4.176					
2.	6.3.2 Provide online application, registration, fee payment	17	4.471					
3.	6.3.3 Provide online financial aid information and processing	17	4.235					
4.	6.3.4 Provide online textbook ordering and access to digital content	17	4.235					
5.	6.3.5 Deliver tutoring and academic remediation	17	3.647					
6.	6.3.6 Provide online transcript information	17	3.412					
7.	6.3.7 Deliver online library resources	17	4.529					
		Average	**4.101**					

References

ACU. (2006). Framework for Online Pedagogical Development: Principles and Guidelines. Brisbane, Sydney, Canberra, Ballarat & Melbourne: Australian Catholic University (ACU).

Allan, B. (2004). E-learners' experiences of time. Networked Learning Conference.

Allen, I. E., & Seamen, J. (2009). Learning on Demand: Online Education in the United States, 2009 Babson Research Group and The Sloan Consortium.

Allen, T. H. (2006). Raising the Question Number 1: Is the Rush to Provide on-Line Instruction Setting Our Students up for Failure? Communication Education, 55(1), 122-126.

American Library Association. (2004). Standards for Distance Learning Library Services. Retrieved May 18, 2009, from http://www.ala.org/ala/mgrps/divs/acrl/standards/guidelinesdistancelearning.cfm.

Anderson, E. (2003). Retention for rookies. National Conference on Student Retention, San Diego, CA.

Australian Catholic University (2006) Framework for Online Pedagogical Development: Principles and Guidelines. Brisbane, Sydney, Canberra, Ballarat & Melbourne: Australian Catholic University.

Baptista-Nunes, M. and McPherson, M. (2002). No lectures on campus: can eLearning provide a better learning experience? IEEE International Conference on Advanced Learning Technologies

Barnard, L., Paton, V. O., & Rose, K. (2007). Perceptions of Online Course Communications and Collaboration. Online Journal of Distance Learning Administration, 10(4).

Beetham, H. (2007). An Approach to Learning Activity Design. In H. Beetham & R. Sharpe (Eds.), Rethinking Pedagogy for a Digital Age: Designing and Delivering E-Learning (pp. 26-40). London & New York: Routledge.

Bilham, T. (2006). Creating and Sustaining Online Communities of Practice. Paper presented at the AISHE Conference 2006. Retrieved from http://www.aishe.org/events/2005-2006/conf2006/proceedings/paper-28.doc.

Bocchi, J., Eastman, J. K., & Swift, C. O. (2004). Retaining the Online Learner: Profile of Students in an Online Mba Program and Implications for Teaching Them. Journal of Education for Business, 79(4), 245-253.

Bond, A., Davey, D., & Roberts, S. (2006). Blended Learning and 'New Academic Teams': Developing Potential in the Ite Context. Paper presented at the 2nd Annual ESCalate ITE Conference. Retrieved from http://www.edgehill.ac.uk/solstice/ResearchandDissemination/documents/ESCALATEMay2006.pdf.

Bouhnik, D., & Marcus, T. (2006). Interaction in distance-learning courses. Journal of the American Society for Information Science and Technology, 57(3), 299-305.

Bozarth, J., Chapman, D. D., & LaMonica, L. (2004). Preparing for Distance Learning: Designing An Online Student Orientation Course. Educational Technology & Society, 7 (1), 87-106.

Britain, S. (2007). Learning Design Systems. In H. Beetham & R. Sharpe (Eds.), Rethinking Pedagogy for a Digital Age: Designing and Delivering E-Learning (pp. 103-114). London & New York: Routledge.

Brown Yoder, M. (2006). Learning Online: Addressing the Unique Needs of Online Students, Retention Strategies for Online Student Success. Vail, CO: Academic Impressions.

Bunderson, C. V. (1974). The design and production of learner-controlled courseware for the TICCIT system: a progress report. International Journal Man-Machine Studies, 6 (4), 479- 491.

Burdette, J. (2003). A switch to online takes time: Academics' experiences of ICT innovation. Paper presented at the 20th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education. In G.Crisp, D.Thiele, I.Scholten, S.Barker and J.Baron (Eds), Interact, Integrate, Impact: Proceedings of the 20th Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education. Adelaide, 7-10 December2003. Retrieved from http://www.ascilite.org.au/conferences/adelaide03/docs/pdf/84.pdf.

Butler, D.L. & Sellbom, M. (2002). Barriers to adopting technology for teaching and learning. Educause Quarterly. 25(2), 22-28.

Cao, K. X. (2005). Three levels of motivation in instruction: Building interpersonal relations with learners. Distance Learning, 2(4), 1-6.

Carr, S. (2000). As Distance Education Comes of Age, the Challenge Is Keeping the Students. Chronicle of Higher Education, 46(23), A39-41.

Chaney, B. H., Eddy, J. M., Dorman, S. M., Glessner, L., Green. B. L., & Lara-Alecio, R. (2007). Development of an instrument to assess student opinions of the quality of distance education courses. The American Journal of Distance education, 21(3), 145-164.

Chickering, A. W., & Erhmann, S. C. (2008). Implementing the Seven Principles: Technology as Lever. Retrieved October 19, 2009, from http://www.tltgroup.org/programs/seven.html.

Clarke, A. (2002). Online Learning and Social Exclusion. Online Learning and Social Exclusion

Clyde, W., & Delohery, A. (2005). Using Technology in Teaching. New Haven, CT: Yale University Press.

Concannon, F., Flynn, A., & Campbell, M. (2005). What campus-based students think about the quality and benefits of e-learning. British Journal of Educational Technology, 36(3), 501-512.

Conole, G. (2004). E-Learning: The Hype and the Reality. Journal of Interactive Media in Education, 12, 1-18.

Conole, G., de Laat, M., Dillon, T. & Darby, J. (2006). An in-depth case study of students' experiences of e-Learning – how is learning changing? Proceedings of the 23rd annual ascilite conference, Sydney, Australia. Retrieved from http://ascilite.org.au/conferences/sydney06/proceeding/pdf_papers/p127.pdf.

Conrad, R.-M., & Donaldson, J. A. (2004). Engaging the Online Learner. San Francisco, CA: Jossey-Bass.

Corry, M., & Watkins, R. (2007). Strategy for the Learner: A Student's Guide to e-Learning Success. The eLearning Guild's Handbook of e-Learning Strategy, pp63-68, The eLearning Guild. Retrieved September 2, 2008, from http://www.freeebooksblog.com/ebooks/The-eLearning-Guilds-Handbook-of-e-Learning-Strategy.pdf.

Craig, A., Coldwell, J., & Goold, A. (2007). Roles and Responsibilities in Online Learning: Perceptions of Students. Paper presented at the Institute of Teaching and Learning Conference. Retrieved from http://www.deakin.edu.au/itl/conferences/presentation07/jocoldwell.ppt.

Craig, A., Goold, A., Coldwell, J., & Mustard, J. (2008). Perceptions of Roles and Responsibilities in Online Learning: A Case Study. Interdisciplinary Journal of E-Learning and Learning Objects, 4, 205-223.

Cramphorn, C. (2004). An evaluation of the formal and underlying factors influencing student participation with e-learning web discussion forums. Networked Learning Conference

Daniel, J. S. (2008). New Approaches to Quality and Standards for New Forms and Modes of Learning? Paper presented at the AUQF2008: Quality & Standards in Higher Education: Making a Difference. Retrieved from http://www.auqa.edu.au/auqf/2008/program/papers/daniel.pdf.

Delialioglu, O., & Yildirm, Z. (2007). Students' Perceptions on Effective Dimensions of Interactive Learning in a Blended Learning Environment. Educational Technology & Society, 10(2), 133-146.

Denholm, J. W. (2004). Flexible Delivery in Higher Education: Global Scan: Case Studies (Discussion paper). Glasgow, UK: Quality Assurance Agency for Higher Education (QAAHE).

Diaz, D. (2002). Online Drop Rates Revisited. The Technology Source. Retrieved October 19, 2009, from http://technologysource.org/article/online_drop_rates_revisited/.

Dietz-Uhler, B., Fisher, A., & Han, A. (2008). Designing Online Courses to Promote Student Retention. Journal of Educational Technology Systems, 36(1), 105-112.

DiMario, D., & Wolverton, M. (2006). Integrating Learning Communities and Distance Education: Possibility or Pipedream? Innovative Higher Education, 31(2), 99-113.

Edmonds, C. D. (2004). Providing access to students with disabilities in online distance education: Legal and technical concerns for higher education. The American Journal of Distance Education, 18, 51-62.

Feldstein, M. (2008). Why the Retention Early Warning Critics Are Wrong, e-Literate (Vol. 1 November).

Finnegan, C. (2006). Assess & Monitor Student Performance. Paper presented at the Retention Strategies for Online Student Success.

Frankola, K. (2001). Why online learners drop out. Workforce. Retrieved May 18, 2009, from http://articles.findarticles.com/p/articles/mi_m0FXS/is_10_80/ai_79352432.

Fredericksen, E., Pickett, A., Shea, P., Pelz, W., & Swan, K. (1999). Student satisfaction and perceived learning with on-line courses: Principles and examples from the SUNY learning network. Retrieved December 9, 2008, from http://www.sloan-c.org/publications/jaln/v4n2/v4n2_fredericksen.asp.

Gaytan, J., & McEwen, B. C. (2007). Effective online instructional and assessment strategies. The American Journal of Distance education, 21(3), 117-132.

Gibbs, G., Regan, P., & Simpson, O. (2006). Improving student retention through evidence based proactive systems at the Open University (UK). Journal of College Student Retention, 8(3), 359-376.

Gilbert, J., Morton, S., & Rowley, J. (2007). E-Learning: The Student Experience. British Journal of Educational Technology, 38(4), 560-573.

Goodacre, C., Bridgland, A., Kikrpatrick, D., Smith, A., D'Alessandro, N., Carrington, N., et al. (2006). Benchmarks for the Use of Technology in Learning and Teaching in Universities. Canberra: Australasian Council on Open, Distance and e-Learning (ACODE).

Hameed, S., Badii, A., & Cullen, A. J. (2008). Effective E-Learning Integration with Traditional Learning in a Blended Learning Environment. Paper presented at the EMCIS 2008. Retrieved from http://www.iseing.org/emcis/EMCIS2008/Proceedings/Refereed%20Papers/Contributions/C%2037/Blended_Learning%20efficiency%20asessment-OKOK.pdf.

Hannon, J., & D'Netto, B. (2007). Cultural Diversity Online: Student Engagement with Learning Technologies. International Journal of Educational Management, 21(5), 418-432.

Harvey, L., & Drew, S. (2006). The first-year experience: Briefing on induction (Briefing paper). York: The Higher Education Academy.

Hayes, C. (2002). The role of the mentor in retention of online students. Retrieved May 18, 2009, from http://www.icte.org/T01_Library/T01_264.PDF.

Hill, C. (2007). Finding Helpful Patterns in Student Engagement. Strategies for Increasing Online Student Retention and Satisfaction. Distance Education Report, August 2007.

Hillesheim, G. (1998). Distance learning: Barriers and strategies for students and faculty. The Internet and Higher Education, 1(1), 31-44.

Howell, S. L., & K., B. (2006). Good (Best) Practices for Electronically Offered Degree and Certificate Programs: A 10-Year Retrospect. Distance Education Report, 3(1), 41-47.

Hrabe, D. P., Gazda, R. B., & Berg, B. C. (2005). Igniting the SPARK: Supporting the technology needs of online learners. Distance Learning, 2(5), 13-17.

HRC. (2008). Best Practices in Online Education. Washington, DC: The Hanover Research Council.

Hu, C. (2007). "Here Are My Best Online Contributions and Why": Students' Perceptions of Good Online Participation. Paper presented at the 22nd ASCILITE Conference. Retrieved from http://www.ascilite.org.au/conferences/singapore07/procs/hu.pdf.

Hughes, G. (2007). Using Blended Learning to Increase Learner Support and Improve Retention. Teaching in Higher Education, 12(3), 349-363.

Hung, D. W. L., & D. Chen (2001). Situated Cognition, Vygotskian Thought and Learning from the Communities of Practice Perspective: Implications for the Design of Web-Based E-Learning. Educational Media International, 38(1), 4-12.

IPSOS MORI. (2007). Student Expectations Study: Key Findings from Online Research and Discussion Evenings Held in June 2007 for the Joint Information Systems Committee (Briefing paper). Bristol: Joint Information Systems Committee (JISC).

IPSOS MORI. (2008). Great Expectations of ICT: How Higher Education Institutions Are Measuring Up (Research). London: Joint Information Systems Committee (JISC).

JISC. (2004). Designing for Learning: An Update on the Pedagogy Strand of the JISC Elearning Prorgamme: Joint Information Systems Committee (JISC). http://www.jisc.ac.uk/whatwedo/programmes/elearningpedagogy.aspx.

Kanuka, H., & Jugdev, K. (2006). Distance Education MBA Students: An Investigation into the Use of an Orientation Course to Address Academic and Social Integration Issues. Open Learning, 21(2), 153-166.

Keller, J. M. (2008). First Principles of Motivation to Learn and E3-Learning. Distance Education, 29(2), 175-185.

Kellner (2006). Technological transformation, multiple literacies, and the re-visioning of education. In J. Weiss et al. (Eds) The international handbook of virtual learning environments, p241-268. New York, Springer.

Kennedy, G., Krause, K.-L., Judd, T., Churchward, A., & Gray, K. (2006). First Year Students' Experiences with Technology: Are They Really Digital Natives? (Preliminary report findings). Melbourne: Centre for Higher Education, The University of Melbourne, Biomedical Multimedia Unit, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne.

Kenny, J. (2003). Student Perceptions of the Use of Online Learning Technology in Their Courses. Melbourne: RMIT.

Kirkwood, A., & Price, L. (2005). Learners and learning in the twenty-first century: What do we know about students' attitudes towards and experiences of information and communication technologies that will help us design courses. Studies in Higher Education, 30(3), 257-274.

Koper, R. (2006). Current Research in Learning Design. Educational Technology & Society, 9(1), 13-22.

Kvavik, R. B., & Caruso, J. B. (2005). ECAR study of students and information technology: Convenience, connection, control, and learning. Retrieved March 24, 2006 from http://www.educause.edu/ir/library/pdf/ers0506/rs/ERS0506w.pdf.

Laws, D., Howell, S., L., & Lindsay, N. K. (2003). Scalability in Distance Education: "Can We Have Our Cake and Eat It Too?" Online Journal of Distance Learning Administration, 6(4).

Lim, C. P. (2004). Engaging Learners in Online Learning Environments. TechTrends: Linking Research & Practice to Improve Learning, 48(4), 16-23.

Lockitt, B. (2004). Adult, Community and work based learning: e-learning. 3T productions.

Lorentsen, A., Bygholm, A., Wilt, J., Heiner, M., Schneckenberg, D., Kokkeler, B., et al. (2004). Pedagogical Models and Online Pedagogy. Heverlee: EuroPACE. http://www.virtualcampuses.eu/index.php/Collaborative_European_Virtual_University

Lotkowski, V.A., Robbins, S.B., & Noeth, R.J. (2004). The role of academic and non-academic factors on improving college retention. ACT Policy Report. Retrieved October 19, 2009, from http://www.act.org/research/policymakers/pdf/college_retention.pdf.

Ludwig-Hardman, S., & Dunlap, J. (2003). Learner support services for online students: Scaffolding for success. International Review of Research in Open and Distance Learning, 4(1), 1-15.

Luschei, T. F., Dimyati, S., & Padmo, D. (2008). Maintaining E3-Learning While Transitioning to Online Instruction: The Case of the Open University of Indonesia. Distance Education, 29(2), 165-174.

Lynch, M. M. (2001). Effective student preparation for online learning. Retrieved May 18, 2009, from http://technologysource.org/article/effective_student_preparation_for_online_learning/.

Macauley, B. (2007). Institutionalizing Retention Efforts. Paper presented at the Retention Strategies for Online Student Success.

Mager, J. (2003). Personalization and customization: Your keys to recruitment and retention success. National Conference on Student Retention, San Diego, CA.

Mandernach, B. J., Donnelli, E., & Hebert-Dailey, A. (2006). Learner Attribute Research Juxtaposed with Classroom Practice: Predictors of Success in the Accelerated, Online Classroom. Journal of Educators Online, 3 (2). http://www.thejeo.com/Volume3Number2/MandernachFinal.pdf

Maroulis, J., & Reushle, S. (2005). Blurring of the Boundaries: Innovative Online Pedagogical Practices in an Australian Faculty of Education. Paper presented at the 17th Biennial Conference of the Open and Distance Learning Association of Australia. Retrieved from http://www.odlaa.org/events/2005conf/ref/ODLAA2005Moroulis-Reushle.pdf.

Marshall, S. (2007). E-learning maturity model: Process assessment workbook, version 2.3. New Zealand Ministry of Education, Wellington, New Zealand. Retrieved May 18, 2009 from http://www.utdc.vuw.ac.nz/research/emm/Publications.shtml.

Mayes, T., & de Freitas, S. (2007). Learning and E-Learning: The Role of Theory. In H. Beetham & R. Sharpe (Eds.), Rethinking Pedagogy for a Digital Age: Designing and Delivering E-Learning (pp. 13-25). London & New York: Routledge.

McLoughlin, C., & Visser, T. (2003). Quality E-Learning: Are There Universal Indicators? Paper presented at the 16th Open and Distance Learning Association of Australia. Retrieved from http://www.odlaa.org/publications/2003Proceedings/pdfs/mclougv.pdf.

McVay, M. (2001). How to be a successful distance learning student: Reflections on the experience of study. London, Kogan Page.

Meyer, K. (2003). Face-to-face versus threaded discussions: the role of time and higher-order thinking. Journal of Asynchronous Learning Networks, 7(3).

Moore, K., Bartkovich, J., Fetzner, M., & Ison, S. (2003). Success in Cyberspace: Student Retention in Online Courses. Journal of Applied Research in the Community College 10(2):107-118.

Morris, L., Wu, S., & Finnegan, C. (2005). Predicting retention in online general education courses. The American Journal of Distance Education, 19(1), 23-36.

Muilenburg, L. Y., & Berge, Z. (2005). Student barriers to online learning: A factor analytic study. Distance Education, 26(1), 29-48.

Nagel, Dave (2009). Most College Students to Take Classes Online by 2014. Retrieved from http://campustechnology.com/articles/2009/10/28/most-college-students-to-take-classes-online-by-2014.aspx.

Nied, D., Barnes, A., Parks, B., & Berkey, J. (2007) Student affairs case study competition 2007. Paper presented at the Virtual Case Study Competition. Retrieved from http://www.studentaffairs.com/vcs/2007entries/WesternIllinoisUniversity_Nied.ppt.

O'Neill, L. (2001). Universal design for learning: making education accessible to all learners. Syllabus, 14(9), pp. 31-32.

O'Brien, B. S., & Renner, A. L. (2002). Online Student Retention: Can It Be Done?, ED-MEDIA Conference. Denver, CO.

Pattison, S. A. (2003-2004). The Effect of an Orientation on Distance-Program Satisfaction. Journal of College Student Retention: Research, Theory & Practice, 5(2), 205-233.

Paulsen, M. F. (2007). Megatrends in Online Distance Education: Survey and Analyses of European Megaproviders of E-Learning. Paper presented at the E-learning in Europe: From projects to practice. Retrieved from http://home.nki.no/~morten/pp/CopenhagenApril07.ppt.

Prendergast, G. A. (2003). Keeping student dropout numbers low. Retrieved May 18, 2009 from http://www.spcollege.edu/eagle/research/beep/beep53.pdf.

Ragan, L. C. (1999). Good teaching is good teaching: An emerging set of guiding principles and practices for the design and development of distance education. Cause/Effect, 22(1). Retrieved July 18 2008, from http://www.educause.edu/ir/library/html/cem/cem99/cem9915.html.

Ridley, D. R., & Sammour, H. Y. (1996). Viable Alternative Means of Instructional Delivery: Online Courses as an Alternative Teaching Method. College Student Journal, 30, 337-339.

Rovai, P.A. (2002). Building Sense of Community at a Distance. International Review of Research in Open and Distance Learning. Retrieved October 19, 2009, from http://www.irrodl.org/index.php/irrodl/article/view/79/152.

Salmon, G. (2000). E-Moderating: The Key to Teaching and Learning Online. London: Kogan Page.

Schaffhauser, D. (2009). Survey reports many online learners never seek help before dropping out. Campus Technology. Retrieved May 18, 2009, from http://www.campustechnology.com/Articles/2009/01/09/Survey-Reports-Many-Online-Learners-Never-Seek-Help-Before-Dropping-Out.aspx.

Seely Brown, J. (2008). How to Connect Technology and Content in the Service of Learning. Chronicle of Higher Education, 55(8), A120.

Shaik, N. (2005). Marketing Distance Learning Programs and Courses: A Relationship Marketing Strategy. Retrieved from http://www.westga.edu/~distance/ojdla/summer82/shaik82.htm.

Sharpe, R., Benfield, G., Lessner, E., & DeCicco, E. (2005). Final report: Scoping study for the pedagogy strand of the JISC learning programme. Unpublished internal report 4(1) JISC. Retrieved from http://www.jisc.ac.uk/uploaded_documents/scoping%20study%20final%20report%20v4.1.doc.

Sheely, S. D., Veness, D., & Rankine, L. (2001). Building the Web Interactive Study Environment: Mainstreaming Online Teaching and Learning at the University of Western Sydney. Australasian Journal of Educational Technology, 17(1), 80-95.

Simpson, O. (2003). Student retention in online open and distance learning. London: Routledge: Falmer.

Simpson, O. (2004). The impact on retention of interventions to support distance learning students. Open Learning: The Journal of Open and Distance Learning, 19(1), 79-95.

Siragusa, L. (2002). Research into the Effectiveness of Online Learning in Higher Education: Survey Findings. Paper presented at the Western Australian Institute for Educational Research Forum. Retrieved from http://www.waier.org.au/forums/2002/siragusa.html.

Smith, P.J. (2001). Learners and their workplaces: Towards a strategic model of flexible delivery of training in the workplace. Journal of Vocational Education and Training, 53(4), 609-628.

Sweeney, J., O'Donoghue, T., & Whitehead, C. (2004). Traditional face-to-face and web-based tutorials: a study of university students' perspectives on the roles of tutorial participants. Teaching in Higher Education 9(3). July 2004, 311-323.

Tait, J. (2004). The tutor/facilitator role in student retention. Open Learning: The Journal of Open and Distance Learning, 19(1), 97-109.

Taylor, J. (2002). Automating e-Learning: The Higher Education Revolution. Retrieved from http://www.backingaustraliasfuture.gov.au/submissions/issues_sub/pdf/i43_3.pdf.

Topper, A. (2007). Are They the Same? Comparing the Instructional Quality of Online and Face-to-Face Graduate Education. Assessment & Evaluation in Higher Education, 32(6), 681-691.

Tresman, S. (2002). Towards a Strategy for Improved Student Retention in Programmes of Open, Distance Education: A Case Study from the Open University UK. International Review of Research in Open and Distance Learning 3(1), 1-11.

Tweedel, C. (2006). Retention Initiative and Strategies for Student Success. Paper presented at the Retention Strategies for Online Student Success.

Tyler-Smith, K. (2006). Early Attrition Among First Time eLearners: A Review of Factors that Contribute to Drop-out, Withdrawal, and Non-completion Rates of Adult Learners Undertaking eLearning Programmes. Journal of Online Learning and Teaching, Vol. 2 Number 2. Retrieved October 19, 2009, from http://jolt.merlot.org/Vol2_No2_TylerSmith.htm.

Tynan, B., & Colbran, S. (2006). Podcasting, Student Learning and Expectations. Paper presented at the 23rd Annual ASCILITE Conference. Retrieved from http://www.ascilite.org.au/conferences/sydney06/proceeding/pdf_papers/p132.pdf.

U.S. Department of Education. (2009). Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies.

Visser, L., & Visser, M. (2005). But first there are the communication skills. Distance Learning, 2(4), 24-29.

Vonderwell, S., & Turner, S. (2005). Active learning and preservice teachers experiences in an online course: A case study. Journal of Technology and Teacher Education, 13(1), 65-84.

Vonderwell, S., & Zacharia, S. (2005). Factors that influence participation in online learning. Journal of Research on Technology in Education, 38(2), 213-230.

Wang, J., & Wu, E. (2004). Recommendations for Reducing Dropout from Distance Education Courses. Paper presented at the World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (Chesapeake, VA, 2004). Retrieved from http://www.eric.ed.gov:80/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED491521.

Warner, D., Christie, G., & Choy, S. (1998). The readiness of the VET sector for flexible delivery including on-line learning. Brisbane, Australian National Training Authority.

Waterhouse, S., & Rogers, R. O. (2004). The importance of policies in e-learning instruction. Educause Quarterly(3), 28-39.

Wheeler, S. (2005). Creating Social Presence in Digital Learning Environments: A Presence in Mind? Paper presented at the TAFE Conference. Retrieved from http://videolinq.tafe.net/learning2005/papers/wheeler.pdf.

Yorke, M. (1999). Leaving early: Undergraduate non-completion in higher education. London: Falmer.

Yorke, M. (2004). Retention, Persistence and Success in On-Campus Higher Education, and Their Enhancement in Open and Distance Learning. Open Learning, 19(1), 19-32.

Yukselturk, E., & Inan, F. (2006). Examining the factors affecting student dropout in an online learning environment. Turkish Online Journal of Distance Education 7(3), 6.] Retrieved May 18, 2009 from, http://tojde.anadolu.edu.tr/tojde23/pdf/article_6.pdf.

Zepke, N., & Leach, L. (2005). Integration and Adaptation: Approaches to the Student Retention and Achievement Puzzle. Active Learning in Higher Education 6(1), 46-59.