Resources for Implementing Personalized Learning & Competency-Based Education

Personalized learning is being implemented in many of today's schools. The goal of personalized learning is to increase students' involvement and engagement in their own education while developing skills that are essential to success in any adult setting. Personalized learning is often problem- based and emphasizes a multidisciplinary approach to learning. Personalized learning is also digitally supported and asks students to be directly involved in the design of their own learning process with the freedom to create their own learning goals and engage in self-reflection as they work to meet those goals. In other words, personalized learning gives students a voice and a choice in what, how, when, and where they learn.

In personalized learning settings, teachers provide the flexibility and support necessary for students to master the highest possible standards by tailoring students' learning experiences according to their needs. Personalized learning is enhanced by **competency-based education (CBE)**, which focuses primarily on students' efforts to acquire specific skills and knowledge in order to meet identified goals. Like personalized learning, CBE concentrates on the specific needs and interests of students, allowing them to work at their own pace with support from teachers, parents, and the community. The goal for both CBE and personalized learning is for **students to become the leaders of their own learning** with **teachers as activators** of student learning, ensuring that students are mastering the competencies determined for their academic growth.

Main Ideas	Additional Information	Resources
	What is Personalized Learning?	
In classrooms where personalized learning is emphasized, teachers and students work together to help students meet their learning goals. There is a healthy learning environment where a strong sense of self and community is present.	• **Personalized learning** is an approach to teaching and learning that provides opportunities for students to engage in the following actions: 　○ Explore **relevant and authentic topics**; 　○ Make **important connections** between their studies, their curiosities, their passions, and the skills they are learning; 　○ Engage in a **diverse set of learning experiences** across a variety of courses, activities, and programs; 　○ Identify their **own learning styles** and think about how they think and process information; 　○ Choose their **process and product** for learning, and even **what they learn about** according to their interests; 　○ Strengthen **critical thinking, creativity, and collaboration skills**;	The Institute for Personalized Learning Personalized Learning Implementation Toolkit Competency-based Learning or Personalized Learning from the US Department of Education

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Main Ideas	Additional Information	Resources
	What is Personalized Learning?	

	○ Blend academic development with a **career ready focus**;
	 ○ C**onnect to community organizations** in order to complete community projects and to work on real-life problem solving skills;
	 ○ Learn **anytime and anywhere**.
	
	 ● Personalized Learning not only increases levels of student engagement, student retention, and student attendance but it also yields improved test scores and **higher levels of accomplishment** overall.
	 ● Personalized learning includes the following components:
	   ○ **Learner profiles** which are regularly updated with students' current strengths, challenges, interests, and goals;
	   ○ **Student self diagnosis and action plans** where students are provided with feedback and clear learning progressions and empowered to analyze their own learning trajectory, appraise their own success and set goals;
	   ○ **Personal learning paths** where students are held to high standards, yet their experiences are adaptable according to their needs, motivations, interests and goals so that students' paths to mastery of content become individualized;
	   ○ **Competency-based progression** in which students' mastery of defined learning goals are assessed on demand—when students are ready to demonstrate what they have achieved;
	   ○ **Flexible learning environments** that are student-centered and adaptable according to students' needs—digital technology is a key component;
	   ○ **Emphasis on college and career readiness** where the focus of the learning
		Describing the Habits Mind
		
		 Through the Students' Eyes: A Perspective on Personalized Learning and Practice Guide for Teachers
		
		 Learner Profiles
		
		 Resources for Getting Started With Project Based Learning

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Main Ideas	Additional Information	Resources
	What is Personalized Learning?	
	experiences is to help students develop academic and non-academic ("habits of mind", "student agency", etc.) skills to prepare for success in future careers. ● Thoughtfully implemented and supported, personalized learning helps **fill the gaps for students who have often struggled** with certain content, concepts, and skills so that they not only master the learning but also enjoy it.	

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Main Ideas	Additional Information	Resources
	Trust and Collaboration Support Strong Personalized Learning Experiences	
A community of trust and an emphasis on collaboration among students, teachers, administrators, and parents allows students to feel free to make honest and sincere choices in their personalized learning experience.	● Teachers need to create an environment where **all students' contributions are valued** and where each student's individuality is **celebrated**. This allows for a strong **social and emotional connection between student and teacher** and helps teachers observe, assess, and provide feedback to the students with more clarity and accuracy. ● There are several phases in the process of establishing a healthy personalized learning environment. Consider the following: ○ In the **assessment phase,** students and teachers work together using the formative process to identify their strengths and weaknesses. ○ In the **teaching and learning phase** students and teachers choose the learning strategies they will use. ○ In the **curriculum choice phase** each student in collaboration with the teacher chooses a path to follow to meet learning goals. The students can sometimes determine it they want to work independently or collaboratively. Choice also can involve a selection of the topic to study, resources to use, and type of presentation to deliver. ○ In the **instructional departure phase** teachers depart from traditional education models and base their choice of instructional practices on their students' individual needs and progress. ○ In the **education beyond the classroom phase** students use their personal and community associations, often with the help of the teacher, to connect with their ideal learning environment. Such environments can include museums, libraries, community organizations, universities, and Internships.	Developing Students' Trust: The Key to a Learning Partnership Building Trust With Students 5 Requirements for Building Trust in the Classroom Kamm Solutions Collaborating with Others Formative Assessment Self-directed Learning: A Four Step Process

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Main Ideas	Additional Information	Resources
	Formative Instruction Supports Personalized Learning	

Formative instruction and assessment practices are integral to the success of personalized learning opportunities for students.	• Teachers should expect to implement and identify various starting points for mastery of skills, concepts, and content, depending on students' needs. These **varied starting points** will require the following practices:
	  ○ **Assess students' prior knowledge** and experience with the skills and concepts that are to be mastered, prior to the learning experience;
	  ○ **Activate students' curiosity** about various aspects of the content and concepts; engage students through inquiry;
	  ○ **Collect reliable evidence of student learning throughout the learning process** to help students make decisions about their individual needs and progress;
	  ○ **Provide effective feedback** and allow students multiple opportunities for success, using the feedback;
	  ○ **Guide students** to make academic decisions that are thoughtful and reasonable for their needs;
	  ○ Provide opportunities for **students to work with and teach one another;**
	  ○ **Gather and analyze** student data to inform the teacher's response.
	
	• Teachers need to be allowed the time necessary to work with students individually and establish individual **learner profiles** where teachers help students record their individual strengths, weaknesses, interests, learning gaps, personal and academic goals, and aspirations.
	
	• In order to measure mastery of the content, there needs to be **clear learning expectations**
		Kamm Solutions Assessment and Formative Learning
		
		Sample Editable Rubric
		
		Use Flexible Pacing to Embrace Students' Differences
		
		18 Teacher Tested Strategies for Differentiated Instruction
		
		Principles of Learning (including expectations)

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Main Ideas	Additional Information	Resources
	Formative Instruction Supports Personalized Learning	
	(competency-based goals/mastery) established from the start for students both collectively and individually. These should **align with the standards** selected as targets for learning and be clearly conveyed to students as they begin working on a new project, problem, or experience. ● **Innovative grading practices** that are based on **competency-based mastery** need to be clearly outlined for students, parents, and teachers.	

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Main Ideas	Additional Information	Resources
	Rigor, Reflection, and Choice are Hallmarks of Personalized Learning	

A personalized learning classroom is a place in which there is rigor, reflection, and abundant flexibility and choice, which promotes self-directed learning.	● Teachers need to **design instruction** that is not only rigorous but allows for flexibility, adaptability, critical thinking and metacognitive processing. Such instruction can be achieved through the following practices:
	  ○ **Problem-based learning**,
	  ○ Differentiated learning experiences with **frequent feedback**,
	  ○ **Flexible pacing**.
	
	● Personalized learning is enhanced by **mindfulness** opportunities:
	  ○ When one engages in mindfulness, one seeks **self-awareness** and **greater understanding** by focusing on the **present** with **gentle acceptance.**
	  ○ When engaging in **mindfulness practices** guided by well-prepared teachers, students
	    • Increase their ability to **concentrate** on their projects,
	    • Gain a **deeper understanding** of their own thoughts and emotions,
	    • Draw more effectively on **previously learned material**,
	    • Experience **less anxiety**,
	    • Think and express themselves more **creatively**.
	
	● Students should have **many options** from which to choose to meet their needs and interest and master their learning goals with the help of their teachers. For example,
	  ○ Students may choose which book to read for their book chat, which topic to research for a project, how they will present what they have learned from their research of a
		Kamm Solutions Collaborative Curriculum:
		
		Kamm Solutions' Guidelines for Problem-based Learning
		
		Problem-based Learning
		
		Taking Global Education Beyond the Classroom
		
		Kamm Solutions Guidelines for Using Mindfulness i

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Main Ideas	Additional Information	Resources
	Rigor, Reflection, and Choice are Hallmarks of Personalized Learning	
	problem, or how they will write the procedures for their lab report. ○ Students may all be working on the same content but move through it at their own pace or provide different kinds of evidence or create different products that demonstrate their mastery of certain skills and concepts. ● In a personalized learning classroom, students learn to **manage their use of time, their schedules and tasks**, and, with the help of teachers, chunk the steps or phases required to meet their learning goal.	

**Resources for Implementing Personalized Learning
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Main Ideas	Additional Information	Resources
	Digital Tools Enhance and Extend Personalized Learning	
Digital tools are a critical part of personalized learning because they allow students and teachers to enhance and extend learning beyond the classroom.	● To **reach beyond the classroom**, students will often use digital **technology** to conduct research, communicate, and connect with various resources and people to support their learning. ● Teachers may need to **shift their thinking** on how they implement and use technology so that it is not just an addendum to traditional teaching practices but rather transforms learning. ● Many schools that practice personalized learning have adopted the **one-to-one ratio for students and devices** where students use tablets or laptops daily in their courses to ○ Access documents, websites, and other course information; ○ Conduct research; ○ Watch course related videos or screencasts that can be sped up or slowed down or even tagged so they are searchable; ○ Participate in live, virtual lectures, discussions, or conferences; ○ Use interactive programs, create blogs, videos, presentations, and more; ○ Engage with digital tools that enhance skill development. ● **Adaptive programs for reading and mathematics** have filled gaps that traditional teaching strategies struggled to fill. Note that it is important to find adaptive programs that strike a balance between being both fun and educational rather than being too much like a videogame with little educational value, or simply being a digital worksheet.	Kamm Solutions Using Digital Tools in the Classroom Cool Tools for Schools Children's Internet Protection Act The 10 Best Classroom Digital Tools for Gathering Feedback How Technology is Moving Arts Education Beyond the Classroom Blended Learning The Flipped Classroom

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Main Ideas	Additional Information	Resources
	Digital Tools Enhance and Extend Personalized Learning	
	• **Data tools support feedback in real time** using classroom feedback systems enhanced by feedback tools on mobile devices (Google forms, Poll Everywhere, Kahoot, etc.). • Finding digital tools, programs, resources and platforms (iReady, Ed Elements, etc.) that **align with content and allow teachers to collect and combine student data** is an important part of personalized learning.	

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Main Ideas	Additional Information	Resources
	School Actions to Support Personalized Learning	

Although personalized learning may at first present a challenge to schools, there are specific actions that schools can take to support the implementation of this future-focused approach.	• If personalized learning constitutes a major departure from how a school currently operates, then its implementation will require **significant and sustained support** from the administration and the staff to be executed effectively.
	
	• In conventional staff development gatherings, teachers will likely respond with varying levels of interest and engagement regarding adopting and utilizing school-wide personalized learning. The following are **professional development suggestions:**
	  ○ **Small-group staff development gatherings** will allow teachers the opportunity to explore, discuss, and develop their ideas regarding personalized learning.
	  ○ Teachers need **models for effective practices in personalized learning,** and they need professional development instruction that is practical, specific to their classroom challenges and concerns, and personalized.
	  ○ **Teachers will need the time, support, and resources to embed personalized learning in their classrooms** including opportunities to research, adopt, and develop sound teaching strategies for personalized learning.
	  ○ Teachers need time for **collaboration** about the impact of these personalized practices and opportunities to **shadow** one another in action. Collaborative planning needs to **extend throughout the school year**, not just at the onset.
	  ○ Collaborative teacher teams should also **include specialists** (EL, special ed., etc.) in order to better meet the needs of each student.
	
	• Conventional school structures may not support a fluid implementation of personalized learning;
		Changing Systems to Personalized Learning
		
		Kamm Solutions' Guidelines for Professional Collaboration
		
		Changing Systems to Personalized Learning: The Power of Advisories
		
		The Shifting Paradigm of Teaching: Personalized Learning According to Teachers 11 Essentials for ePortfolios

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Main Ideas	Additional Information	Resources
	School Actions to Support Personalized Learning	
	therefore, **adapting a school structure with time built in for teachers to develop personalization** and work individually with students requires the support of principals and other school leaders. There needs to be a bottom up and top down support system in place. Some of the structural changes that may be needed to implement personalized learning include the following suggestions: ○ **Advisories** where students meet with a teacher for consecutive school years, be it once a day for ten minutes or once a week, to review their learning. The intent of the advisory is to review **feedback** so that students can better plan, reflect, and discuss their learning experiences. ○ **Personalized Learning Plans (PLPs)** that are more than just course selections, but fluid documents that record students' hopes and goals as well as their reflections on their learning experiences. ○ **A personalized learning department** where faculty assignments are diversified in ways that help change classroom practices. This may require a combination of both content driven departments and personalized learning departments. ○ A **shift in control and responsibility** from solely the teacher to also include peers, students, community members, and parents. ○ A change of practice where **students learn to manage their own time, set goals, and work toward desired results** – all essential skills for success in universities as well as any adult professional setting. ○ **Best work portfolios** that show what students can do and that include personal projects, internships, travel and work experiences, and community service, etc.	[Kamm Solutions' Feedback Guidelines](#) [5 Research-based Tips for Providing Students with Meaningful Feedback](#) [Turn Your Classroom into a Personalized Learning Environment](#)

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Main Ideas	Additional Information	Resources
	School Actions to Support Personalized Learning	

	Portfolios provide clearer evidence for college/career readiness than do grade reports.
	• **Implementation of personalized learning** has worked best when
	   ○ Clearly defined, **modeled practices** are part of the change;
	   ○ **Professional learning** that is ongoing is provided for everyone involved in the change;
	   ○ **Teachers choose** what personalized learning practices to use and how they want to implement those practices in their classrooms;
	   ○ Follow up **support** is available within and outside of the classroom;
	   ○ There is **time to adjust and refine** practices and strategies;
	   ○ Experiences are **shared**, celebrating the individual successes of teachers and students;
	   ○ Everyone works together in a **risk-free environment** built on trust and collaboration.	

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Main Ideas	Additional Information	Resources
	What is Competency-Based Education (CBE)	
Competency-based Education (CBE) focuses primarily on students' efforts to acquire specific skills and knowledge in order to meet identified goals. It enhances personalized learning with accountability and evidence of learning.	- As with **Personalized Learning, CBE is an approach to education** that focuses on the **specific needs and interests** of students, allowing them to **work at their own pace** with support from teachers, parents, and the community. **Personalized Learning** also **aligns well with CBE** because tthey both focus on the specific needs and interests of students, allowing them to work at their own pace with support from parents, teachers, and the community. - Competency-based programs are also known as **proficiency, performance, or mastery-based programs**. The competencies within CBE are generally defined as the compilation of knowledge and skills that students need in order to accomplish specific tasks and reach set goals. - A central difference between CBE and traditional learning is **how time is viewed in the instructional process.** Rather than a specific amount of time allotted (usually a 180-day school year) in which students are to meet a certain number of academic goals and are rated according to how well they have done so (i.e. letter grades are assigned), CBE emphasizes the notion that learning is constant but **the time frame in which students master certain competencies is undetermined and flexible**. **Effective CBE programs** typically have the following characteristics: - The students advance when they **demonstrate mastery of specific goals**, regardless	[What is Competency Education?](#) [Competency-Based Learning or Personalized Learning from the US Department of Education](#)

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Main Ideas	Additional Information	Resources
	What is Competency-Based Education (CBE)	
	of the instructional time spent working toward mastery or the place in the school year that mastery was achieved; ○ The competencies students are working toward "reflect **explicit, measurable, transferable learning**"; ○ The stated **objectives for the learning are relevant to one another** and across the curriculum; ○ The specific learning **outcomes emphasize the competencies**, including the application and creation of knowledge, along with the development of important skills and concepts. ○ Teachers use **meaningful assessment** throughout the teaching and learning process to measure students' progress and inform instructional decisions; ○ Teachers **differentiate their instruction** and provide **individual support** that aligns with students' individual needs and interests; ○ Teachers and students **use technology** to not only make the learning and instructional process transparent, but also more manageable and actionable (Twyman, 2014).	

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Main Ideas	Additional Information	Resources
	The Logistics of Implementing Competency-Based Education (CBE)	

The logistics of implementing CBE challenge traditional ideas and systemic practices in schools	● **Funding** for schools becomes more complex with the implementation of CBE. For example, many schools that once used attendance records to determine funding now allow for students that are taking online courses, participating in school/work programs, mentoring programs, independent study, and home or hospital bound programs.
	
	● **Seat time** or time that students spend in a physical classroom changes with CBE:
	   ○ Some schools require students to have actual seat time in a classroom for a certain amount of time--but not the traditional 180 or so days--to allow for flexibility in when and where they learn.
	   ○ Other schools have provisions where students may be exempt from time-in-class requirements if they demonstrate proficiency in certain subjects.
	
	● **Credits** can be earned by students in new ways with CBE:
	   ○ In secondary schools in particular where students traditionally earn a certain number of credits by seat time and by meeting specific academic requirements, CBE has the potential to allow students to earn credits from dual-credit courses (early college courses for advanced students), internship programs, blended learning, online courses, portfolios, and more.
	   ○ Note that providing these opportunities for students to earn credits and coordinating the credit earning process will require broad and substantial planning within districts and states.
		Competency-Based Learning Models: A Necessary Future
		
		[OBJ]Student Professional Development: Competency-Based Learning and Assessment

Main Ideas	Additional Information	Resources
	The Logistics of Implementing Competency-Based Education (CBE)	
	● **Credit recovery** in secondary schools for students who have failed courses can be challenging, but is easily solved with CBE. Students who need to recover credits have already put in the seat time for a course but did not successfully complete the class. They can have access to a variety of ways for recovering the credits they missed when CBE is in place. ● **Competencies** within the tenets of CBE extend beyond the academic. CBE also emphasizes the critical importance of competencies in metacognition, motivation, and social and emotional growth. ● **Standards** such as those in the Common Core State Standards must be linked with competencies in order to align the system, the policies, and the practices in schools and districts. ● **Assessment** in CBE focuses most significantly on measuring students' progress as they work toward mastering specific competencies. ● **Data and Measurement** in CBE requires consensus and uniformity in the description of the competencies that students are to master within a school system.Competencies are only useful when they can transfer across systems students will encounter (i.e. schools, districts, states, universities, future employers). ● **Grading Systems** in CBE focus on students mastering competencies and as a general rule, do	

Main Ideas	Additional Information	Resources
	The Logistics of Implementing Competency-Based Education (CBE)	
	not accept the idea that mastering 70% of the content is "passing." In other words, CBE eliminates the equivalent of C or D grades and focuses on proficiency. ● **Mastery** of competencies in CBE requires that students are persistent. Often they will have to engage with material from different angles and in different ways, which is known as the "recycle until mastery" process (Twyman, 2014). In CBE when students' struggle to master a competency it is considered a learning opportunity rather than a failure. The students' struggle informs instruction and the teacher and student work together to adapt the learning experience to help the student understand and connect with the material. ● **Grade Levels** in CBE should ideally be more flexible within the school calendar, and while doing away with rigid grade levels completely makes sense with CBE, few schools have been able to do so of yet. Schools that plan to implement CBE need to be creative within the confines of the grade level structure until more flexibility in grade levels is legislated.	

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Main Ideas	Additional Information	Resources
	Easing the Transition to CBE Through Leadership and Strategies	
Specific practices and policies will help ease the transition to CBE programs.	- In order for a transition to CBE to be successful, **superintendents and principals** need to first be on board with the process. A commitment to CBE may require a leadership shift to a more collaborative style than some leaders are accustomed to, but it is essential in CBE.Superintendents and principals need to be supportive of teachers and provide for them **training, resources, and collaborative professional learning teams.** - As with all educational programs, CBE needs to be **evaluated regularly**. A RAND report suggests these evaluations be near-term as the following measures are considered: students' testing outcomes; attendance; long-term evaluations such as high school graduation rates and college acceptance; and other valid measures of the program's impact (Steele et al, 2014). **Teachers** in CBE programs need to be exceptional. CBE calls for an increase in student autonomy and this requires that teachers use creative and supportive strategies to engage all students. Teachers need to understand their new role in CBE including: - Facilitating cycles of adaptive instruction and providing timely feedback to students, - Helping students obtain the habits of learning they need to be responsible and take ownership of what and how they are learning. **Equity** is also a concern with CBE in that it calls for students to self-motivate and self-direct as well as emphasizes academic skill over academic effort. Some students may struggle with this process and educators need to identify and provide support for these students to lessen any potential achievement gap that could arise.	Steps to Help Schools Transform to Competency-Based Learning Teaching Differently in Competency-Based Schools Competency-Based Education in Three Pilot Programs Seven Keys to Effective Feedback Habits of Learning Engaging Students in Learning

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