

# Braille on Demand

## One-Day Braille Transcription Service

...look around for a need and start coming up with ideas to fill that need. One idea will lead to another, and before you know it...you've done it! See a need, fill a need!  
- the character Bigweld, from the movie "Robots"

"See a need, fill a need" is a driving philosophy behind Iowa Prison Industries (IPI), which provides work training opportunities to men and women incarcerated in Iowa's state prisons. IPI's programs have been shown to provide returning citizens with the skills needed to successfully re-enter our communities, which translates into fewer crime victims and lower costs to taxpayers.

In addition to traditional programs producing license plates, office furniture and clothing, IPI operates a braille transcription and production service known as the Anamosa Braille Center based at the Anamosa State Penitentiary. This IPI program employs 30 men certified or training in Literary Braille, Nemeth Code (For Mathematics), Music Braille and Literary Proofreading. The program includes comprehensive tactile graphic production for all transcribers as well.

Iowa educators seek to instruct students with sight-impairments alongside their sighted peers. But these educators can be at a big disadvantage when it comes to providing educational materials due to the lengthy time typically associ-



Construction of the stately Anamosa State Penitentiary began in 1874 using stone from a local quarry. Cells were four feet, 6 inches wide, seven feet six inches in height, and eight feet in length. It was almost ten years later that electric lights were first used.

ated with braille transcription. Educators are normally required to submit next year's entire curriculum for braille transcription early in the spring of the current school year, in order to have these materials available for their students when the new school year begins. Often, educators must wait for administration decisions on

curriculum before they can place their order for braille transcription. And if a student with a sight impairment changes school districts, let the scramble begin!

There is also a trend toward using worksheets and articles downloaded from the internet alongside traditional textbooks, materials that are not always available



**DAN CLARK**, Dan Clark is the Director of Iowa Prison Industries, a work training program for the men and women incarcerated within Iowa's nine state prisons. One of these programs, the Anamosa Braille Center, transcribes educational materials for school children with sight impairments. Prior to joining IPI, Dan spent 30 years in private industry. He holds an M.B.A. from the University of Buffalo and an M.S. from the Rensselaer Polytechnic Institute in Troy, NY. Dan and his spouse Kristin reside in West Des Moines, Iowa.



Every day nearly 200 men from the Anamosa prison go to work for Iowa Prison Industries, making license plates, furniture, signs, and transcribing braille. Work training provides the men with income, and prepares them for re-entry back into Iowa communities.



Braille transcriptionists at the Anamosa Braille Center are certified by the U.S. Library of Congress after years of study and testing. Specialized transcription software and OCR programs assist these men in transcribing braille within one business day for the Braille on Demand program.

months in advance. And impromptu collaboration between different subject area teachers and curriculum changes during the school year can be difficult to accommodate if educators are not experienced braille transcriptionists with access to an embosser. One educator told IPI, “There is only so much I can do since I am not a certified transcriber.”

Seeking to improve the accessibility of instructional materials for schoolchildren with sight impairments [See a need], men at the Anamosa Braille Center developed a new service known as “Braille on Demand”. This new service would do something a little bit crazy – email IPI a document today, and we’ll email you back an electronic braille file tomorrow! [Fill a need].

Together with the Iowa Department of Education, IPI introduced the Braille on Demand service on a prototype basis in late 2015, giving a limited number of Iowa educators the opportunity to have documents transcribed into braille in just 24 hours. As the program began, the plan was for educators to upload one to four-print pages of material via the IPI website, which the Anamosa Braille Center would transcribe and email back to them for embossing at their school.

But during the first year that the prototype service was available, a number of unexpected developments occurred:

1. Demand for the service was much higher than anticipated
2. The variety of documents needing braille transcription was much wider than expected;
3. Few educators wanted to emboss the braille themselves, instead preferring IPI send them the finished product via UPS
4. The needs of individual students varied quite a bit, requiring a personalized approach.

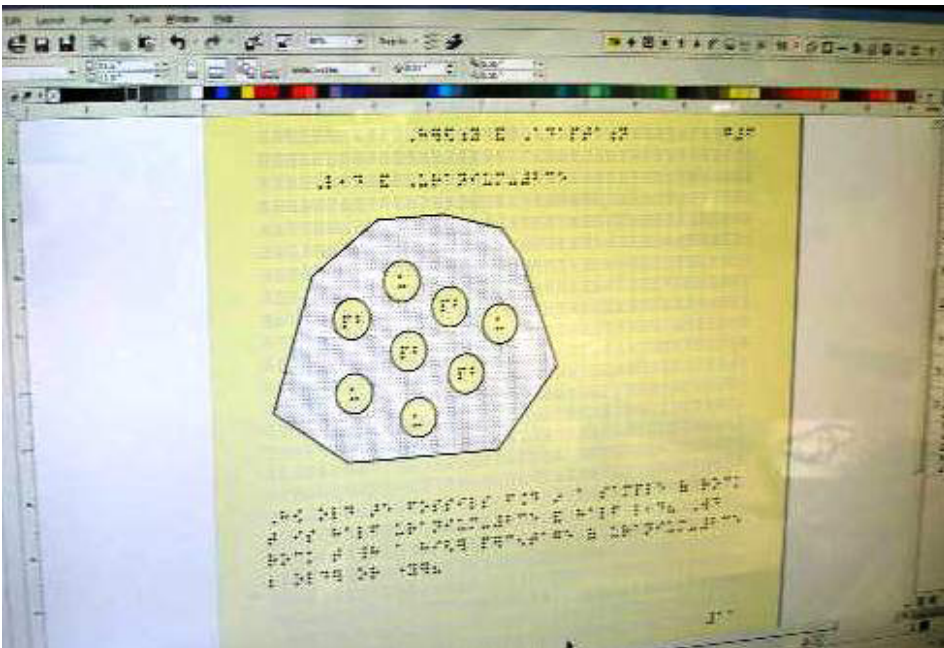
### **DEMAND FOR THE SERVICE WAS MUCH HIGHER THAN ANTICIPATED.**

It soon became clear that IPI was on to something big with Braille on Demand.





The Anamosa Braille Center produces hundreds of thousands of braille pages using high speed embossing equipment.



Students with sight impairments need accessible materials for all sorts of subjects, and the Braille on Demand program transcribes these within one business day.

One educator wrote us saying:

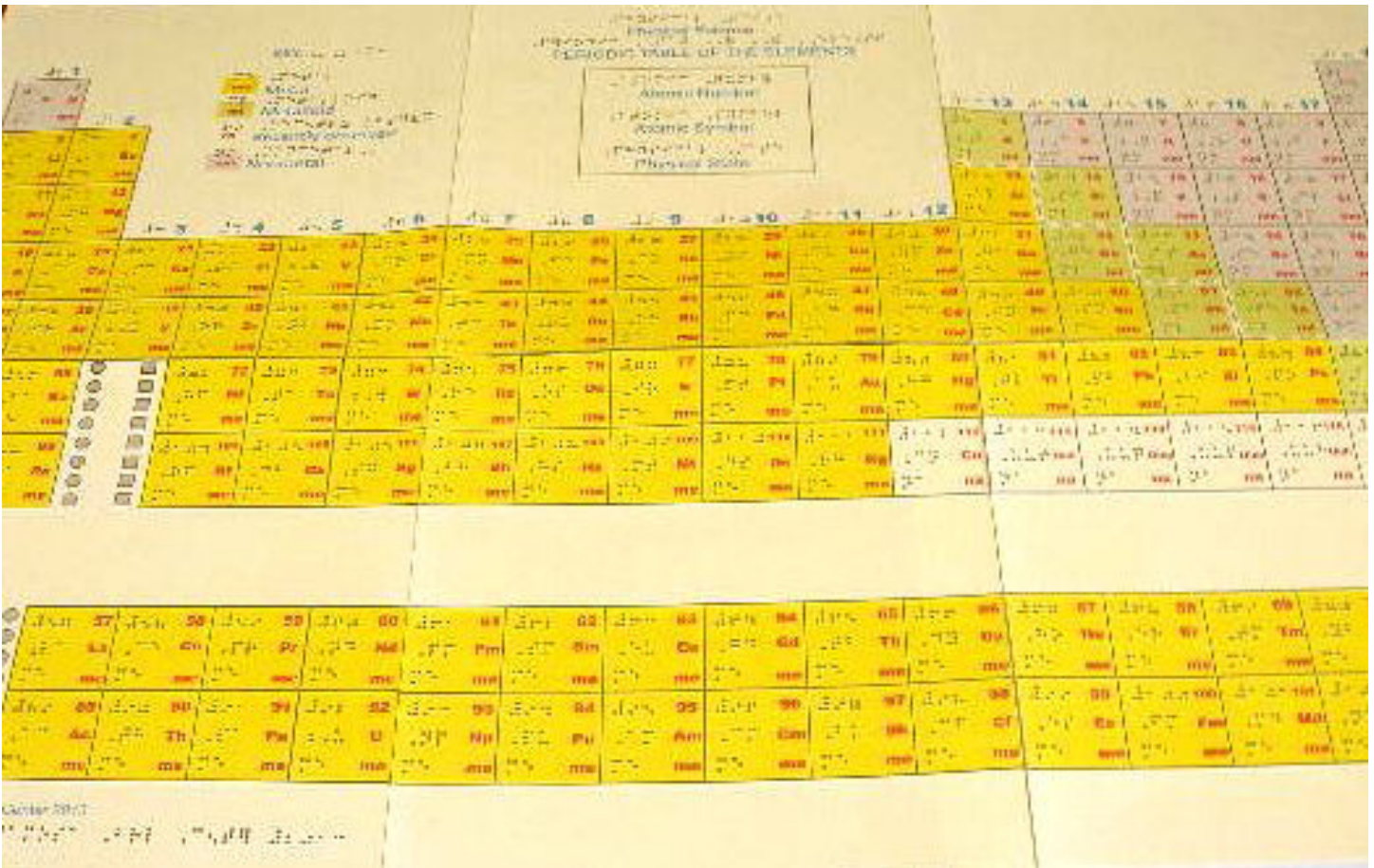
*"Braille on Demand needs to be offered in the future for everyone working with students who are learning Braille. The direct contact, the idea of them thinking creatively on how to deliver Braille in a timely manner and in a variety of situations, and the willingness to communicate directly and quickly not only opens doors to student access to Braille, but also changes the way educators approach their teaching. [Braille on Demand] could make the state of Iowa a leader in braille instruction. If Braille on Demand continues, Iowa will have something that the majority of states can only dream of."*

The volume of Braille on Demand grew exponentially, doubling after its first full year, and tripling the year after that!

Some unique aspects of working in a correctional setting are that offender movement can sometimes be restricted ("lockdowns"), and that offenders are frequently transferred to different facilities as they get closer to release (more than 90% of those incarcerated in Iowa are scheduled to be released). The Anamosa Braille Center developed a transcriber network linking three additional satellite facilities, which provided new transcription capacity as Braille on Demand grew. The satellites also allowed men to continue transcribing as they transitioned to other institutions, and provided redundant capacity in case a lockdown occurred.

### **THE VARIETY OF DOCUMENTS NEEDING BRAILLE TRANSCRIPTION WAS MUCH WIDER THAN EXPECTED.**

One educator best summed up the services of Braille on Demand, "As a TVI, Braille on Demand has been a real game-changer in regards to my job. Last minute braille needs used to really throw a cog in things, now we can relax because we KNOW things will be taken care of. This not only includes braille, but Nemeth and tactile graphics as well. The big plus is IPI's willingness to adapt quickly to any situation, sending things in time no matter the circumstance. Braille on Demand



The high volume and wide variety of projects that educators send into the Braille on Demand program was a surprise to the Anamosa transcriptionists. Transcriptionists at three other facilities were networked to provide additional transcription capacity.

is the perfect name for a service that has gone far towards letting students [with sight-impairments] have materials at the same time as their sighted peers.”

While IPI expected short, quick-turn-around projects such as “backpack stuffers,” the reality was that there was an unmet need to quickly transcribe all sorts of documents – everything from standardized tests to news articles to textbook chapters. The wide variety of projects was a surprise, but the men in Anamosa welcomed the challenge and appreciated knowing how much the schoolchildren needed these transcriptions.

### **EDUCATORS WANTED IPI TO SEND THEM THE FINISHED PRODUCT VIA UPS.**

The original idea for Braille on Demand was that documents would be upload-

ed by an educator, and then IPI would email back a braille file that could be embossed there at the school. It turned out that fewer educators than expected were equipped with the ability to emboss braille at their local school, so Braille on Demand immediately expanded its services to include embossed braille sent via UPS Next Day directly to the school. Now, the vast majority of projects are embossed at IPI’s facility in Anamosa and sent via courier.

### **THE NEEDS OF INDIVIDUAL STUDENTS VARIED QUITE A BIT, REQUIRING A PERSONALIZED APPROACH.**

One of the biggest surprises to the men at the Anamosa Braille Center was a desire on the part of educators to tailor transcription projects to the needs of

their individual students.

Typical braille transcription projects involve textbooks, literary works, or worksheets – these materials are put into braille according to standardized rules. They’re one-size-fits-all out of necessity, because that textbook or reader or worksheet might be used by any number of children, each of whom might be reading braille at a different level. So the rules of transcription are fairly rigid.

In contrast, each Braille on Demand project is for a specific student, and this specific student has his or her unique set of circumstances – their skill at reading braille of course, but potentially they may have other physical challenges, or perhaps an educator that is not overly proficient in braille, or whatever.

As a result, men at the Anamosa Braille Center worked with educators to develop





The Anamosa Braille Center uses the tools of lean manufacturing to continuously improve their operation.

a profile of needs for each individual student, and the IPI website was modified to assist educators in this process. Transcribers worked with individual educators to customize braille for each individual student, such as partially contracted braille, added math or tactile graphics, and offering interline (print over braille). In addition, the Anamosa Braille Center raised the number of allowed pages per order to a maximum of ten pages at the request of educators.

## THE FUTURE OF BRAILLE ON DEMAND? EXPRESS BRAILLE.

The Braille on Demand service has definitely addressed an unmet need for accessible materials – respondents to the most recent online survey ranked it as 4.96 out of a possible 5.0. One educator responded to the survey saying

*“Being a part of the Braille on Demand program showed me its value. While materials can be ordered through another entity for the beginning of each school year, the fluidity of teaching means many things come up that weren’t planned, and Braille on Demand allows one to adjust teaching direction while knowing that students [with*

*sight-impairments] will have the same materials as their sighted peers. Students state that the graphics available through Braille on Demand are of a much better quality than those created on an embosser. Another aspect, and in many cases more important, is the availability of special orders such as Print over braille or partially contracted braille with the same expected turnaround time as any other order. I cannot stress enough how huge this is to beginning braille readers. My colleagues are jealous of my ability to have been ordering things during this pilot process. Truly, these special orders could completely change the way beginning braille readers are taught.”*

Braille on Demand was developed for Iowa schoolchildren and their educators, and is funded by the Iowa Department of Education. What about children in other states with sight impairments? To meet the needs of children outside of Iowa, IPI introduced “Express Braille,” available to any educator or nonprofit organization in the U.S. and Canada.

Express Braille offers the same services as Braille on Demand, with the Anamosa Braille Center transcribing projects in one business day. Transcription costs \$9.90

per uploaded page, and users can pay with a p-card, credit card or purchase order. Embossed materials ship via UPS, so delivery times may differ depending on your location. (Shipping charges are added for embossed materials.)

The ordering process is simple: Log on to [expressbraille.iaprisonind.com](http://expressbraille.iaprisonind.com), create an account for your student with their individual profile of needs, and upload your document - the Anamosa Braille Center will do the rest!

Orders are limited to a maximum of ten uploaded pages per student per day, so that all educators can receive their braille in one business day. Maps and advanced biology tactile graphics are difficult to produce in the Express Braille timeframe, so for these and for estimates of larger or unique work or general inquiries, please contact the Anamosa Braille Center at 800-332-7922 or [ipibraille@iowa.gov](mailto:ipibraille@iowa.gov).

*See a need, fill a need.* Iowa Prison Industries saw the need to make learning materials more accessible for Iowa’s schoolchildren with sight impairments. Braille on Demand fills that need. Now, Express Braille will help schoolchildren nationwide with sight impairments access the same materials as their sighted classmates and assist their educators with one-day braille transcription.

*This article was authored by one of the men at the Anamosa Braille Center. Braille on Demand has improved the accessibility to instructional materials for students with sight impairments. It has also positively impacted the men providing this service, one of whom said “this is one of the best things I have ever been involved in. Hearing the impact Braille on Demand is having on these students makes me feel like my work has value. We are giving braille to kids who would otherwise not be able to learn what their classmates are learning. We are making a big difference in the lives of these kids and that is a good feeling.”* ■